

83771-1001

EU CLP SDS
Version No.: 1.0
Trade Name: Alcohol Based Marker Ink

Page 1 of 34
Issuing Date: Jul. 29, 2019
Print Date: Jul. 29, 2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
 - Trade name: Alcohol Based Marker Ink
 - Registration number: Data not available
- 1.2 Relevant identified uses of the substance or mixture and uses advised against on
 - Application of the substance/ mixture: Marker Pen.
- 1.3 Details of the supplier of the safety data sheet
 - Manufacturer/Supplier:
Wenzhou Jinma Stationery Manufacturing Co., Ltd
No.288, Oufan Road, Oujiangkou Industrial Zone, Wenzhou, China
Tel: +086 577 8658 0085
Fax: +086 577 8658 0086
Email: 1458775972@qq.com
 - Only Representative/other EU contact point: Information not available.
 - Further information obtainable from: Wenzhou Jinma Stationery Manufacturing Co., Ltd
- 1.4 Emergency telephone number
 - General in EU
Tel: 112 (Available 24 hours a day)
 - In China
Tel: +086 189 0677 2775 Hezhen Yang (Available 24 hours a day)

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
Classification according to regulation (EC) 1272/2008:



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour



GHS07 Exclamation mark

Skin Sens. 1 H317 May cause an allergic skin reaction

Eye Irrit. 2 H319 Causes serious eye irritation

STOT SE 3 H336 May cause drowsiness or dizziness

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects

- Classification system:

The classification is according to the latest edition of Regulation 1272/2008, and extended by company and literature data.

- 2.2 Label elements

· Labeling according to Regulation (EC) No 1272/2008: The product is labeled according to Regulation (EC) No 1272/2008.

- Hazard pictograms:



EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink	Page 2 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
--	--

GHS02	GHS07
• Signal word: <i>Danger</i>	
• Hazard statements:	
H225	Highly flammable liquid and vapour
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H412	Harmful to aquatic life with long lasting effects
• Precautionary statement:	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370 + P378	In case of fire: Use CO ₂ , chemical powder, water spray or alcohol resistant foam to extinguish. Do not use water with full jet
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local regulation.
• 2.3 Other hazards	
• Results of PBT and vPvB assessment	
PBT: Not applicable	
vPvB: Not applicable	

SECTION 3: Composition/information on ingredients

• 3.1 Chemical characterization: Mixture

• Description:

Mixture of the substances listed below with nonhazardous additions; For the wording of the listed risk phrases refer to section 16.

• Component:		
CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5	Ethanol ⚠ Flam. Liq. 2, H225	54.84% ~74.00%
CAS No.: 107-98-2 EC No.: 203-539-1 Index No.: 603-064-00-3	Propylene glycol monomethyl ether ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	25%
CAS No.: 65997-10-6 EC No.: 613-867-0	Rosin, fumarated, polymer with glycerol ⚠ Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	10%
CAS No.: 37318-31-3 EC No.: 253-459-6	α-d-Glucopyranoside, β-d-fructofuranosyl, octadecanoate	0.5%
CAS No.: 8001-79-4 EC No.: 232-293-8	Castor oil	0.5%
I#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.96%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.74%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 3 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.68%
2#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.2%
CAS No.: 12227-55-3 EC No.: 602-483-9	Solvent Red 122	1.1%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.3%
3#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.5%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.2%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.2%
4#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.6%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.3%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.03%
5#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	1.40%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.30%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.10%
6#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1%
7#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.1%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.05%
8#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.11%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.04%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 4 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.03%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
10#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	2.03%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.78%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.07%
11#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	1.84%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.29%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
12#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	1.40%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.39%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.02%
13#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.42%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.30%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
14#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.81%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.53%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.02%
15#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	2.50%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.80%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink	Page 5 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
---	--

CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
16#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.19%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.17%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
17#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.20%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.04%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
18#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.15%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.03%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
21#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	2.52%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.12%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.06%
22#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.45%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.38%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
23#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.05%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.16%
24#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.93%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.07%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink	Page 6 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
---	--




CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
25#		
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.07%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
26#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.08%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
27#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
28#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
29#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.02%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.02%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
31#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	4.00%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.70%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.12%
32#		
CAS No.: 83949-75-1	Basic Yellow 51	0.54%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 7 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
EC No.: 281-435-5	Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.09%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
33#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.65%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 Acute Tox. 3, H301; Acute Tox. 3, H331; Eye Dam. 1, H318; Acute Tox. 4, H312; Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.40%
34#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	3.1%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.11%
35#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	2.72%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 Acute Tox. 3, H301; Acute Tox. 3, H331; Eye Dam. 1, H318; Acute Tox. 4, H312; Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.03%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
36#		
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 Acute Tox. 3, H301; Acute Tox. 3, H331; Eye Dam. 1, H318; Acute Tox. 4, H312; Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.41%
CAS No.: 12227-55-3 EC No.: 602-483-9	Solvent Red 122	0.03%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.02%
37#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.32%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 Acute Tox. 3, H301; Acute Tox. 3, H331; Eye Dam. 1, H318; Acute Tox. 4, H312; Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.09%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
38#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.02%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.01%
41#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	2.39%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 8 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
CAS No.: 12221-86-2	C.I. Basic Yellow 40	1.22%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.10%
42#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.86%
CAS No.: 12227-55-3 EC No.: 602-483-9	Solvent Red 122	0.82%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.70%
43#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.13%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.55%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.03%
44#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	1.57%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.29%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
45#		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.53%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.29%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.08%
46#		
CAS No.: 12221-86-2	C.I. Basic Yellow 40	3.98%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.77%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.11%
47#		
CAS No.: 12221-86-2	C.I. Basic Yellow 40	1.19%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.91%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.40%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 9 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.75%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.06%
49#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.27%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.23%
50#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.48%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.35%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.09%
51#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	2.38%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	1.10%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.34%
52#		
CAS No.: 12221-86-2	C.I. Basic Yellow 40	8.20%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.81%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.15%
53#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	2.42%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.86%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
54#		
CAS No.: 12221-86-2	C.I. Basic Yellow 40	3.39%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.65%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.44%
55#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	2.25%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4,	0.45%

EU CLP SDS	Page 10 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

	H312;  Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51  Acute Tox. 4, H302; Eye Irrit. 2, H319;  Aquatic Chronic 2, H411	0.30%
56#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	1.04%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.69%
57#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	1.53%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.70%
58#		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.55%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.76%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.03%
59#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.81%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.53%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.27%
61#		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	3.02%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.60%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.05%
62#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	1.54%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	1.37%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.58%
63#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	3.74%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.31%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.07%

EU CLP SDS	Page 11 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

64#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	2.60%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.10%
65#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	2.15%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.30%
66#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	1.00%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.04%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.01%
67#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.81%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.05%
68#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.50%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.25%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.08%
69#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	1.81%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	1.12%
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.76%
70#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	2.72%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.60%
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.17%
71#		
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	3.09%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.44%
CAS No.: 11099-03-9	C.I. Solvent Black 5	0.12%

EU CLP SDS	Page 12 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

EC No.: 601-023-4		
72#		
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	2.97%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.08%
73#		
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	1.40%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.40%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.20%
74#		
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	2.87%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.86%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.14%
75#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.20%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.02%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
76#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.22%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.11%
77#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.08%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.03%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.03%
81#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.68%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.31%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.31%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 13 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.66%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.28%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.16%
83#		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.25%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.02%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.02%
84#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	2.00%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.46%
85#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.92%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.21%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.12%
86#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	2.67%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.39%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.04%
87#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	2.94%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.62%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.04%
88#		
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.08%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.38%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.03%

EU CLP SDS	Page 14 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.66%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.01%
91#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.66%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.64%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.33%
92#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.98%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.87%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.23%
93#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.92%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.33%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.24%
94#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	2.34%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.46%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.30%
95#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.75%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.22%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.16%
96#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.85%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.35%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.17%
97#		
CAS No.: 83949-75-1	Basic Yellow 51	0.28%

EU CLP SDS	Page 15 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

EC No.: 281-435-5	⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.08%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.07%
98#		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	1.50%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.43%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.27%
99#		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	2.10%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.26%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.20%
100#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.90%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.15%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.04%
101#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.40%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.05%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.03%
102#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.80%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.30%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.14%
103#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.43%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.19%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.09%

EU CLP SDS	Page 16 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

104#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.05%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.04%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
107#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.85%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.08%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.06%
109#		
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.03%
CAS No.: 12227-55-3 EC No.: 602-483-9	Solvent Red 122	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
131#		
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 ⚠ Acute Tox. 3, H301; Acute Tox. 3, H331; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H312; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.02%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
132#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
133#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.02%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
134#		
CAS No.: 509-34-2	Solvent Red 49	0.01%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 17 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
EC No.: 208-096-8	Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
135#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.01%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.01%
136#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.04%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.01%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 Acute Tox. 3, H301; Acute Tox. 3, H331; Eye Dam. 1, H318; Acute Tox. 4, H312; Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.01%
137#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.04%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 Acute Tox. 3, H301; Acute Tox. 3, H331; Eye Dam. 1, H318; Acute Tox. 4, H312; Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
138#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.07%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.02%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
139#		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.04%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.02%
140#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.09%
CAS No.: 54060-92-3 EC No.: 258-946-7	C.I. Basic Yellow 28 Acute Tox. 3, H301; Acute Tox. 3, H331; Eye Dam. 1, H318; Acute Tox. 4, H312; Aquatic Acute 1, H400; Aquatic Chronic 1, H410(M=1)	0.07%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 18 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.09%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.02%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
142#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.04%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.02%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
143#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.05%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.01%
144#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.02%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.01%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
145#		
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.03%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.02%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
146#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.05%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
147#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.17%
CAS No.: 52080-58-7 EC No.: 610-776-8	Solvent Violet 8	0.01%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%

EU CLP SDS	Page 19 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.09%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.03%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
164#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.23%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.03%
166#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.04%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.03%
167#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.07%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.04%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.03%
169#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.44%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.04%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.02%
171#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.08%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.02%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
172#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.10%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.05%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.01%
173#		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.14%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.11%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.02%

EU CLP SDS	Page 20 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

174#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.59%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.13%
175#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.76%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.10%
CAS No.: 12227-55-3 EC No.: 602-483-9	Solvent Red 122	0.02%
178#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.08%
CAS No.: 12221-86-2	C.I. Basic Yellow 40	0.02%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.01%
179#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.20%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.05%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
182#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.08%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.01%
183#		
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.13%
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.02%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.01%
185#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.05%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	0.01%
196#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.04%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.01%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink	Page 21 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
---	---

CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
198#		
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.07%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.06%
301#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	1.86%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.08%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.06%
305#		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	1.65%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.33%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.11%
311#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.05%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.03%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.01%
312#		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	1.35%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.20%
319#		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.95%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.04%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
341#		
CAS No.: 509-34-2 EC No.: 208-096-8	Solvent Red 49 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.32%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.17%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.04%

EU CLP SDS	Page 22 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

348#		
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.41%
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.12%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.04%
120#		
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	2.09%
CAS No.: 1325-86-6 EC No.: 215-409-1	Solvent Blue 5	1.68%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.97%
BG1		
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.03%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.01%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
BG3		
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.17%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.07%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.01%
BG5		
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.52%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.32%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.04%
BG7		
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	1.52%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.85%
CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.15%
BG9		
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	2.62%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	1.49%

EU CLP SDS	Page 23 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

CAS No.: 12227-67-7 EC No.: 602-487-0	C.I. Solvent Yellow 82	0.25%
CG0.5		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.02%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
CG1		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.05%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
CG2		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.10%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
CG3		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.15%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.02%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
CG4		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.30%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.03%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.01%
CG5		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.48%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.05%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.02%
CG6		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.80%

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink		Page 24 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.08%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.04%
CG7		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	1.33%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.15%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.08%
CG8		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	1.86%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.21%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.11%
CG9		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	2.71%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.32%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.18%
GG1		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.14%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.11%
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.02%
GG3		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.37%
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.28%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.05%
GG5		
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.58%
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.55%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.10%

EU CLP SDS	Page 25 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.79%
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	0.72%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	0.19%
GG9		
CAS No.: 12237-22-8 EC No.: 602-672-6	C.I. Solvent Black 27	1.87%
CAS No.: 12237-24-0 EC No.: 602-674-7	Solvent Blue 70 Aquatic Chronic 3, H412	1.34%
CAS No.: 12237-31-9 EC No.: 602-681-5	C.I. Solvent Yellow 79	0.52%
WG0.5		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.02%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.01%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
WG1		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.04%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.01%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.01%
WG2		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.08%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.02%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.01%
WG3		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.14%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.05%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 ⚠ Acute Tox. 4, H302	0.01%
WG4		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.23%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; ⚠ Aquatic Chronic 2, H411	0.07%
CAS No.: 6320-14-5	C.I. Basic Red 12	0.02%

EU CLP SDS	Page 26 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

EC No.: 228-668-0	Acute Tox. 4, H302	
WG5		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.43%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.11%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 Acute Tox. 4, H302	0.03%
WG6		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	0.63%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.18%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 Acute Tox. 4, H302	0.04%
WG7		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	1.03%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.33%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 Acute Tox. 4, H302	0.07%
WG8		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	1.50%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.46%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 Acute Tox. 4, H302	0.11%
WG9		
CAS No.: 11099-03-9 EC No.: 601-023-4	C.I. Solvent Black 5	2.26%
CAS No.: 83949-75-1 EC No.: 281-435-5	Basic Yellow 51 Acute Tox. 4, H302; Eye Irrit. 2, H319; Aquatic Chronic 2, H411	0.74%
CAS No.: 6320-14-5 EC No.: 228-668-0	C.I. Basic Red 12 Acute Tox. 4, H302	0.17%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: If medical advice is needed, have product container or label at hand.

After inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor, if you feel unwell.

After skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. If skin irritation or rash occurs: Get medical advice/attention.

After eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

Rinsing. If eye irritation persists: Get medical advice/attention.

EU CLP SDS
Version No.: 1.0
Trade Name: Alcohol Based Marker Ink

Page 27 of 34
Issuing Date: Jul. 29, 2019
Print Date: Jul. 29, 2019

After swallowing: Wash mouth. Do NOT induce vomiting; Get medical attention if you feel unwell.

· **4.2 Most important symptoms and effects, both acute and delayed:** *May cause an allergic skin reaction; Causes serious eye irritation; May cause drowsiness or dizziness.*

· **4.3 Indication of any immediate medical attention and special treatment needed:** *Treatment according to symptoms, no known specific medicine.*

SECTION 5: Fire-fighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

Use CO₂, powder, water spray or alcohol resistant foam to extinguish. DO NOT use water with full jet.

· **5.2 Special hazards arising from the substance or mixture:** *Carbon monoxide and aromatic hydrocarbons under fire.*

· **5.3 Advice for firefighters**

Protective equipment: *Wear an approved positive pressure self-contained breathing apparatus (Comply with EN 133).*

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures:**

Cut off leakage source and collect spillage timely if safe do it; Ensure adequate ventilation; Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area); Wear personal protective equipment; Avoid breathing vapor; Beware of accumulation of vapor in low areas or contained areas, where explosive concentrations may occur; Avoid contact eyes and skin; Avoid release to the environment.

· **6.2 Environmental precautions:**

Prevent further leakage or spillage if safe to do so; Prevent spillage from entering drains, sewer, basement or confined areas; if the spillage contaminates rivers, lakes or drains inform respective authorities.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust); Ensure good ventilation; Dispose contaminated material as waste according to item 13.

· **6.4 Reference to other sections:**

See section 7 for information on safe handling; See section 8 for information on personal protection equipment; See section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling:**

Read label before use; Smoking, eating and drinking should be prohibited; Use only in well ventilated areas; Avoid all sources of ignition; Wear protective gloves/protective clothing/eye protection/face protection; Avoid breathing vapors; Use respiratory protective device against the effects of vapor; Avoid contact with eyes and skin; Avoid release to the environment.

· **Information about fire and explosion protection:** *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*

· **7.2 Conditions for safe storage, including any non-compatibility**

· **Requirements to be met by storerooms and receptacles:** *Store in a well-ventilated place. Keep cool.*

· **Information about storage in one common storage facility:** *Keep away from flammable substance; Keep out of reach of children.*

· **Information about storage conditions:** *Store locked up.*

EU CLP SDS
Version No.: 1.0
Trade Name: Alcohol Based Marker Ink

Page 28 of 34
Issuing Date: Jul. 29, 2019
Print Date: Jul. 29, 2019

· 7.3 Specific end use(s): Marker pen.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

Country	Limit value - Eight hours	Limit value - Short term
64-17-5 Ethanol		
Austria	1000ppm; 1900 mg/m ³	2000ppm; 3800 mg/m ³
Belgium	1000ppm; 1907 mg/m ³	-
Denmark	1000ppm; 1900 mg/m ³	2000ppm; 3800 mg/m ³
Finland	1000ppm; 1900 mg/m ³	1300ppm; 2500 mg/m ³ 15 minutes average value
France	1000ppm; 1900 mg/m ³	5000ppm; 9500 mg/m ³
Germany (AGS)	500ppm; 960 mg/m ³	1000ppm; 1920mg/m ³ 15 minutes average value
Germany (DFG)	500ppm; 960 mg/m ³	1000ppm; 1920mg/m ³ 15 minutes average value
Hungary	1900 mg/m ³	7600 mg/m ³
Ireland	-	1000ppm 15 minutes average value
Latvia	1000 mg/m ³	-
Poland	1900 mg/m ³	-
Spain	-	1000ppm; 1910 mg/m ³
Sweden	500ppm; 1000 mg/m ³	1000ppm; 1900mg/m ³ 15 minutes average value
The Netherlands	260 mg/m ³	1900 mg/m ³
United Kingdom	1000ppm; 1900 mg/m ³	-
107-98-2 Propylene glycol monomethyl ether		
Austria	50ppm; 187mg/m ³	50ppm; 187mg/m ³
Belgium	100ppm; 375mg/m ³	150ppm; 568mg/m ³
Denmark	50ppm; 185mg/m ³	100ppm; 370mg/m ³
European Union	100ppm; 375mg/m ³	150ppm; 568mg/m ³
Finland	100ppm; 370mg/m ³	150ppm; 560mg/m ³
France	50ppm; 188mg/m ³	100ppm; 375mg/m ³
Germany (AGS)	100ppm; 370mg/m ³	200ppm; 740mg/m ³ 15 minutes average value
Germany (DFG)	100ppm; 370mg/m ³	200ppm; 740mg/m ³
Hungary	375mg/m ³	568mg/m ³
Ireland	100ppm; 375mg/m ³	150ppm; 568mg/m ³ 15 minutes reference period
Italy	100ppm; 375mg/m ³	150ppm; 568mg/m ³
Latvia	100ppm; 375mg/m ³	150ppm; 568mg/m ³ 15 minutes average value
Romania	100ppm; 375mg/m ³	150ppm; 568mg/m ³ 15 minutes average value
Spain	100ppm; 375mg/m ³	150ppm; 568mg/m ³
Sweden	50ppm; 190mg/m ³	150ppm; 568mg/m ³ 15 minutes average value
United Kingdom	100ppm; 370mg/m ³	150ppm; 560mg/m ³

· DNELs:

DNEL type	DNEL worker value	DNEL consumer value
64-17-5 Ethanol		
Systemic effects	Long-term, inhalation exposure	950 mg/m ³
	Long-term, dermal exposure	343 mg/kg bw/day
		114 mg/m ³
		206 mg/kg bw/day

EU CLP SDS	Page 29 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

	<i>Long-term, oral exposure</i>	-	87 mg/kg bw/day
<i>Local effects</i>	<i>Acute /short term, inhalation exposure</i>	1900 mg/m ³	950 mg/m ³

• **PNECs:**

PNEC type	Value
64-17-5 Ethanol	
<i>Freshwater</i>	960 µg/L
<i>Intermittent releases (freshwater)</i>	2.75 mg/L
<i>Marine water</i>	790 µg/L
<i>Sewage treatment plant (STP)</i>	580 mg/L
<i>Sediment (freshwater)</i>	3.6 mg/kg sediment dw
<i>Sediment (marine water)</i>	2.9 mg/kg sediment dw

• **Additional information:** The lists valid during the marking were used as basis.

• **8.2 Exposure controls**

• **Based on the composition shown in section 3, the following measures are suggested for occupational safety measure.**

• **Appropriate engineering controls:**

Handle in accordance with good industrial hygiene and safety practice; Wash hands and face before breaks and at the end of work; Take off contaminated clothing and wash it before reuse; See section 7 for information about design of technical facilities.

• **Personal protective equipment**

• **Respiration protection:** Use positive pressure breathing mask if concentrations in air could exceed occupational exposure standard.

• **Protection of hands:**



Protective gloves

Gloves made from butyl rubber Neoprene™ rubber, nitrile rubber (thickness > 0.11mm; breakthrough times up to 480 minutes).

• **Eye protection:**



Safety glasses

Protective goggles with side-shields.

• **Environmental exposure controls:**

Control measures must be made in accordance with Community environmental protection legislation.

SECTION 9: Physical and chemical properties

• **9.1 Information on basic physical and chemical properties**

• **Appearance:**

Form	Liquid
Color	Colorful, 170 colors.
Odor	Alcohol smell
Odor threshold	Not determined.
pH-value	Not determined.
Change in condition	
Melting point/melting range	Not determined.
Boiling point and boiling range	Not determined.
Freezing point	Not determined.
Flash point	<23°C (closed cup)

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink	Page 30 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
---	---

· Flammability (solid, gas)	Not applicable
· Decomposition temperature	Not determined.
· Self-ignition	Not determined.
· Danger of explosion	Product is not explosive. However, formation of explosive air/vapor mixtures is possible.
· Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
· Oxidizing properties	Not oxidability.
· Vapor pressure	Not determined.
· Density	Not determined.
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in/Miscibility with	
Water	Soluble with water.
· Partition coefficient (n-octanol/water)	Not determined.
· Viscosity	
Dynamic	Not determined.
Kinematic	Not determined.
· 9.2 Other information	Data not available

SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No decomposition if used according to specification.
- **10.2 Chemical stability:** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions:** No further relevant information available.
- **10.4 Conditions to avoid:** Heat/sparks/open flames/hot surfaces.
- **10.5 Incompatible materials:** Strong acid, strong oxidizing agent and flammable substance.
- **10.6 Hazardous decomposition products:** No further relevant information available.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:** No animal test has been done for this product.

64-17-5 Ethanol		
Rat	LD50-oral	7060 mg/kg
	LC50-inhalation	20000ppm/10H
Rabbit	LD50-oral	6300 mg/kg
Guinea pig	LD50-oral	5560mg/kg
Mouse	LD50-oral	3450 mg/kg
	LC50-inhalation	39000mg/m ³ /4H
107-98-2 Propylene glycol monomethyl ether		
Man	LD50-oral	11700mg/kg

EU CLP SDS	Page 31 of 34
Version No.: 1.0	Issuing Date: Jul. 29, 2019
Trade Name: Alcohol Based Marker Ink	Print Date: Jul. 29, 2019

Rabbit	LD50-skin LD50-oral	13000mg/kg 5700mg/kg
Rat	LC50-inhalation	10000ppm/5H
6320-14-5 C.I. Basic Red 12		
Rat	LD50-oral	980mg/kg
Mouse	LD50-oral	300mg/kg
Rabbit	LD50-oral	3200mg/kg
Remark: All the above data are from literature.		
<ul style="list-style-type: none"> • Skin corrosion/irritation: Based on available data, the classification criteria are not met. • Serious eyes damage/ irritation: Causes serious eye irritation. • Respiratory or skin sensitization: May cause an allergic skin reaction. • Germ cell mutagenicity: Based on available data, the classification criteria are not met. • Carcinogenicity: Based on available data, the classification criteria are not met. • Reproductive toxicity: Based on available data, the classification criteria are not met. • STOT-single exposure: May cause drowsiness or dizziness. • STOT-repeated exposure: Based on available data, the classification criteria are not met. • Aspiration hazard: Based on available data, the classification criteria are not met. 		

SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: Harmful to aquatic life with long lasting effects

64-17-5 Ethanol	
Short-term toxicity to fish	LC50 (4 days) 14.2 - 15.4 g/L EC50 (4 days) 12.7 - 12.9 g/L
Long-term toxicity to fish	NOEC (5 days) 250 - 1 000 mg/L
Short-term toxicity to aquatic invertebrates	EC50 (48 h) 10 g/L LC50 (48 h) 5.012 g/L
Long-term toxicity to aquatic invertebrates	NOEC (10 days) 2 - 9.6 mg/L LC50 (10 days) 1.806 g/L LC50 (48 h) 9.248 g/L
Toxicity to aquatic algae and cyanobacteria	EC50 (4 days) 675 - 22 000 mg/L
Toxicity to aquatic plants other than algae	EC50 (7 days) 4.432 - 5.967 g/L

- 12.2 Persistence and degradability: Readily degradable.

64-17-5	Ethanol	BOD ₅ =1.067 - 1.236 g O ₂ /g test material; COD=1.99 g O ₂ /g test material; Readily biodegradable
---------	---------	--

- 12.3 Bio-accumulative potential: Moderate bio-accumulation.

64-17-5	Ethanol	Log Pow = -0.77 - -0.3 at 24 - 25 °C and pH 7 - 7.4
---------	---------	---

- 12.4 Mobility in soil: High mobility in soil.
- 12.5 Results of PBT and vPvB assessment
PBT: Not applicable
vPvB: Not applicable
- 12.6 Other adverse effects: No further relevant information available.
- 12.7 Additional ecological information

• **General notes: Water hazard class 2 (German Regulation) (self-assessment): Hazardous for water.**


EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink	Page 32 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
--	---

Do not allow the product to reach ground water, water course or sewage system.

SECTION 13: Disposal consideration

- 13.1 Waste treatment methods
 - Recommendation: Must not be disposed together with household garbage, and disposed this product must be in according to the local regulation.
- 13.2 Un-cleaned packaging
 - Recommendation: Dispose of contents/container in according to the local regulation.

SECTION 14: Transport information

• 14.1 UN-Number ADR, RID, ADN, IMDG, IATA	UN 1993
• 14.2 UN proper shipping name ADR, RID, ADN, IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (Contain Alcohol, Propylene glycol monomethyl ether)
• 14.3 Transport hazard class (es) ADR, RID, ADN, IMDG, IATA Class Label	 3 Flammable liquids. 3
• 14.4 Packing group ADR, RID, ADN, IMDG, IATA	II
• 14.5 Marine pollution	No
• 14.6 Special precautions for user • Danger code (Kemler) • EMS number	Warning: Flammable liquids 33 F-E,S-D
• 14.7 UN "Model Regulation"	UN 1993, FLAMMABLE LIQUID, N.O.S. (Contain ALCOHOLS, Propylene glycol monomethyl ether), 3, II

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- MAK (German Maximum Workplace Concentration):

64-17-5	Ethanol	5
---------	---------	---

- Directive 2012/18/EU
- Named dangerous substances-ANNEX I: None of the ingredients is listed.
- Seveso category: P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements: 5000 ton(net)
- Qualifying quantity (tonnes) for the application of upper-tier requirements: 50000 ton(net)
- National regulations.
- Water hazard class: Water hazard class 1 (German Regulation) (self-assessment): Slightly hazardous for water.
- Other regulations, limitations and prohibitive regulations
- SVHC Candidate list of REACH Regulation Annex XIV Authorization: None of the ingredients is listed.
- REACH Regulation Annex XVII Restriction: None of the ingredients is listed.
- REACH Regulation Annex XIV Authorization List: None of the ingredients is listed.

EU CLP SDS
Version No.: 1.0
Trade Name: Alcohol Based Marker Ink

Page 33 of 34
Issuing Date: Jul. 29, 2019
Print Date: Jul. 29, 2019

· *15.2 Chemical safety assessment: A Chemical Safe Assessment has not been carried out.*

SECTION 16: Other information

· *Relevant phrases:*

H225 Highly flammable liquid and vapour
H226 Flammable liquid and vapour
H301 Toxic if swallowed
H302 Harmful if swallowed
H312 Harmful in contact with skin
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H319 Causes serious eye irritation
H331 Toxic if inhaled
H336 May cause drowsiness or dizziness
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, 1272/2008 and Regulation (EU) No 2015/830.

DISCLAIMER OF LIABILITY:

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

· *Abbreviations and acronyms:*

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

PBT: Persistent, Bio accumulative and Toxic

SVHC: Substance of Very High Concern

LD50: Lethal dose, 50 percent

LC50: Lethal concentration, 50 percent

NOEC: No observed effect concentration

EC50: Concentration of maximal effect, 50 percent

Flam. Liq. 2: Flammable liquids, hazard category 2

Flam. Liq. 3: Flammable liquid, hazard category 3

Acute Tox. 3: Acute toxicity, hazard category 3

EU CLP SDS Version No.: 1.0 Trade Name: Alcohol Based Marker Ink	Page 34 of 34 Issuing Date: Jul. 29, 2019 Print Date: Jul. 29, 2019
---	--

Acute Tox. 4: Acute toxicity, hazard category 4
Skin Irrit.2: Skin corrosion/irritation, hazard category 2
Skin Sens. 1: Respiratory or skin sensitisation, hazard category 1
Eye Dam. 1: Eye damage/irritation, hazard category 1
Eye Irrit. 2: Eye damage/irritation, hazard category 2
STOT SE 3: Specific target organ toxicity after single exposure, hazard category 3
Aquatic Acute 1: Hazardous to the aquatic environment- acute toxic, hazard category 1
Aquatic Chronic 1: Hazardous to the aquatic environment- chronic toxic, hazard category 1
Aquatic Chronic 2: Hazardous to the aquatic environment- chronic toxic, hazard category 2

End of safety data sheet

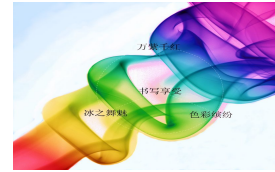
Eurofins (Hangzhou) contact information Customer service: AlinaChen@eurofins.com / +86 571 81907003 Sales specialist: SammyDong@eurofins.com/ +86 571 81907003

The test item is subcontracted to other lab.



the world of ink

Shanghai  University
Nano-Science & Technology Institute
Special Ink R&D Department
Tel: 021-56331532 Fax: 021-56331117
Web: <http://www.inksh.com>
E-mail: sales@inksh.com



Safety Data Sheet

(In according with European Commission Directives 67/548/EEC, 1999/45/EC, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 and Regulation (EU) No 453/2010)

1. Identification of the Substance/Preparation/Company

Product details

Trade name: **fineliner Ink / Black**

Substance/Mixture: Mixture/preparation

Form: Fluid

Relevant identified uses advised against

Identified uses: Laboratory chemicals, Manufacture of the substance/mixture

Product type: _

Manufacturer /Supplier:

Shanghai University Nano-Science & Technology Institute Special Ink R&D Department

No.149 Yanchang Road. Shanghai, China

Phone: 86-21-56331532

Fax: 86-21-56331117

Web: www.inksh.com

Further information obtainable from:

Technical service , Howard Young

Tel: 86-021-56331532

Mobile : 86-13761677741

Information in case of emergency:

Tel: 86-13761677741

2. Hazards identification

Classification of the mixture:

Classification: The mixture is not classified according European Regulation CLP N° 1272/2008 /EC with its adaptation.

Label elements:

No marking according Regulation CLP N° 1272/2008/EC.

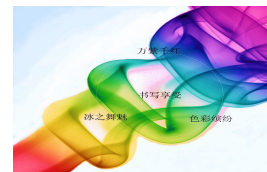
Others Hazard:

There is not having other hazard classification information about the mixture for present knowledge.

the world of ink



Shanghai  University
Nano-Science & Technology Institute
Special Ink R&D Department
Tel: 021-56331532 Fax: 021-56331117
Web: <http://www.inksh.com>
E-mail: sales@inksh.com



3. Composition /information on ingredients

Chemical characterization

Mixture of the following substances: containing non-hazardous substances and coloring pigments.

Description: The following material classification according to 1999/45/EC and CLP N°1272/2008/EC

Components:

CAS	Chemical Name	1999/45/EC	CLP	Cone
56-81-5	GLYCEROL	Not classified	Not classified	25%
5413-75-2	ACID RED 73	Not classified	Not classified	4.4%
1934-21-0	ACID YELLOW 23	Not classified	Not classified	2%
129-17-9	ACID BLUE 1	Not classified	Not classified	3.3%
7732-18-5	water	Not classified	Not classified	65.3%

Additional information: For the wording of the listed risk phrases refer to section 16.

4. First –aid measures

Inhalation: Move the affected person away from the contaminated area and into the fresh air

Skin contact: Immediately wash and rinse with plenty of water

Eye contact: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 min. minimum) Always refer to an eye specialist, even if there are no mediate symptoms.

Ingestion: Never attempt to induce vomiting . Call a doctor immediately

5. Fire –fighting measures

Suitable extinguishing media: Carbon dioxide (CO₂). Foam. Powders

Not suitable extinguishing media: None to our knowledge. If there is a fire close by using suitable extinguishing agents

Specific hazards: During combustion: Toxic vapors may be released if product is heated to dryness.

Specific fire fighting methods: Do not attempt to fight the fire without suitable protective equipment may intervene

Protection of fire-fighters: Self-contained breathing apparatus Complete protective clothing

6. Accidental release measure

Personal precautions: Avoid contact with skin and eyes .Do not breathe vapour; Do not smoking..

Environmental precautions: Do not discharge into drains and rivers

Methods for cleaning up:

Neutralization: Absorb spillage with: inert absorbent material earth or sand

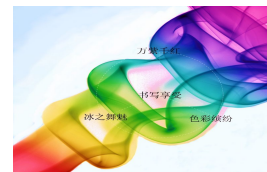
Cleaning/decontamination: Wash non-recoverable remainder with large amounts of water

Disposal: Dispose of contaminated materials in accordance with current regulations

the world of ink



Shanghai University
Nano-Science & Technology Institute
Special Ink R&D Department
Tel: 021-56331532 Fax: 021-56331117
Web: <http://www.inksh.com>
E-mail: sales@inksh.com



7. Handling and storage

HANDLING

Technical measures: Vapour extraction at source . Material and equipment suitable for use with
Strongly colored water based liquids.

Precautions: Avoid any direct contact with the product . Work in a well-ventilated area .Smoking is
forbidden .Avoid the build-up of electrostatic charge

STORAGE

Technical measures: The floor of the depot must be impermeable, noncombustible and designed to form a basin,
in order that stored liquids should not, under any circumstances, be released outside

Storage conditions:

Recommended: Store: in a cool, well-ventilated area, the container tightly closed away from any source of
ignition

Incompatible materials: Strong oxidizing agents

Packaging materials:

Not suitable: Can cause some metals to rust

8. Exposure controls / personal protection

Engineering measures: Ensure good ventilation of the work station .Extraction to remove vapours at their
source

Occupational exposure limits:

France: Ethylene Glycol

Personal protective equipment:

Respiratory protection: In the event of insufficient ventilation: ,Suitable breathing apparatus

Hand protection: Impermeable protective gloves

Eye protection: Safety spectacles

Skin and body protection: Suitable clothing

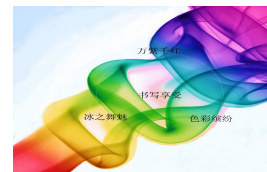
Collective emergency equipment: Eye fountain .Safety shower

Hygiene measures: Do not drink, eat or smoke in the workplace

the world of ink



Shanghai  University
Nano-Science & Technology Institute
Special Ink R&D Department
Tel: 021-56331532 Fax: 021-56331117
Web: <http://www.inksh.com>
E-mail: sales@inksh.com



9. Physical and chemical properties

General Information

Form : Fluid
Colour : black
Odour : watery slightly

Ignition temperature : 287 °C

Self-igniting : Not determined

Danger of explosion : product does not present an explosion hazard

PH: 7.0-8.3

Vapour density (air=1): greater than 1

Solubility

in water : Miscible (in all proportions)
in organic solvents: Miscible (in all proportions) with: glycerol

10. Stability and reactivity

Stability: Stable at ambient temperature and under normal conditions of use

Hazardous reactions:

Conditions to avoid: May ignite on heating to dryness when all water is evaporated

Materials to avoid: Strong oxidizing agents

Hazardous decomposition

products: On combustion or on thermal decomposition

(pyrolysis) releases: Carbon oxides (CO, CO₂)

11. Toxicological information

Acute toxicity: Vapours may cause drowsiness and dizziness

Acute symptoms : On ingestion: Nausea., Vomiting., Central Nervous, System depressant ,

On inhalation: Dizziness, Headaches

Local effects : At high concentrations, the vapours can be irritating to the eyes, nose and throat .Repeated or prolonged contact may cause slight irritation to the skin,

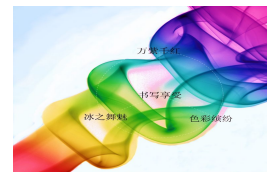
Eye contact: May cause severe ocular lesions

Further information: Above information is for the ink. The ink will be contained in the fibrous reservoir of a small capacity marker containing 3 grams or less which will limit considerably the exposure possibilities for the user.



the world of ink

Shanghai University
Nano-Science & Technology Institute
Special Ink R&D Department
Tel: 021-56331532 Fax: 021-56331117
Web: <http://www.inksh.com>
E-mail: sales@inksh.com



12. Ecological information

ECOTOXICITY: Effects on the aquatic environment: Ethylene Glycol
May cause adverse effects to the aquatic environment.

13. Disposal considerations

WASTE FROM PRODUCT:

Destruction/Disposal: Dispose of in accordance with relevant local regulations

CONTAMINATED PACKAGING:

Destruction/disposal: Destroy at an authorized site

NOTE : The user's attention is drawn to the possible existence of specific European, national or
Local regulations regarding disposal

14. Transport information

International regulations: Not regulated

15. Regulatory information

The product is no classified in accordance with European Regulation on hazardous substance: Directive 67/548/CE 30ème adaptation and on hazardous preparations: Directive 2006/8/CE

National prescriptions:

France: Maladies professionnelles (tableaux (x) n° 84) concern

NOTE : The regulatory information given above only indicate the principal regulations specifically applicable to the product described in the MSDS

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This safety data sheet was prepared in accordance with Regulation (EC) 1272/2008 (Regulation on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006).

Safety data sheet

according to 1907/2006/EC, Article 31



Page 1/5

 Printing date 29.01.2019
 Revision: 18.01.2018
 Version number 2

1 SECTION 1: Identification of the substance/mixture and of the company/ undertaking

- **1.1 Product identifier**
- **Trade name:** *PF 6lxx.1 Series; xx = 02, 52, 72 (various colours)*
- **Article number:** 10000004150
- **Registration number**
The ingredients of this ink meet the criteria of the Regulation 1907/2006/EC (REACH).
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Currently no such applications are identified
- **Application of the substance / the mixture** *pigmented highlighter ink*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
DOKUMENTAL GmbH & Co KG
Woellnerstraße 26
D-67065 Ludwigshafen
Phone + 49(0)621/37702 321
Fax + 49(0)621/37702 391
www.dokumental.de
- **Further information obtainable from:**
Technical Service, Dr. B. Polzin
Tel.: +49-621-37702 322
Mobile +49-1726204412
E-Mail: bernd.polzin@dokumental.de
- **1.4 Emergency telephone number:**
GBK Gefahrgut Büro GmbH
++49 (0) 6132 / 84463
Ingelheim, Deutschland

2 SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** *none*
- **Hazard pictograms** *none*
- **Signal word** *none*
- **Hazard statements** *none*
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

3 SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** *Mixture of substances listed below with nonhazardous additions.*
- **Dangerous components:** *none*
- **Additional information:** *For the wording of the listed hazard phrases refer to section 16.*

4 SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** *No special measures required.*
- **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
- **After skin contact:** *Generally the product does not irritate the skin.*
- **After eye contact:** *Rinse opened eye for several minutes under running water.*
- **After swallowing:** *If symptoms persist consult doctor.*
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** *Use fire extinguishing methods suitable to surrounding conditions.*
- **5.2 Special hazards arising from the substance or mixture** *No further relevant information available.*

(Contd. on page 2)
EU

Safety data sheet
according to 1907/2006/EC, Article 31



Page 2/5
Printing date 29.01.2019
Revision: 18.01.2018
Version number 2

Trade name: PF 61xx.1 Series; xx = 02, 52, 72 (various colours)

- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

(Contd. of page 1)

6 SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

8 SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Nitrile rubber, NBR
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling

9 SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
Form: Fluid

(Contd. on page 3)

EU

Safety data sheet
according to 1907/2006/EC, Article 31



Page 3/5
Printing date 29.01.2019
Revision: 18.01.2018
Version number 2

Trade name: PF 61xx.1 Series; xx = 02, 52, 72 (various colours)

(Contd. of page 2)

Colour:	According to product specification
· Odour:	Product specific
· Odour threshold:	Not determined.
· Important information on protection of health and environment, and on safety.	-
· pH-value at 20 °C:	7.5
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C
· Flash point:	>100 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	400 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Explosion limits:	
Lower:	3.2 Vol %
Upper:	53 Vol %
· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C:	1 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic at 20 °C:	3 mPas
Kinematic:	Not determined.
· Solvent content:	
Water:	50.0 %
Solids content:	0.1 %
· 9.2 Other information	The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications.

10 SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.

(Contd. on page 4)
-EU-

Safety data sheet
according to 1907/2006/EC, Article 31



Page 4/5
Printing date 29.01.2019
Revision: 18.01.2018
Version number 2

Trade name: PF 61xx.1 Series; xx = 02, 52, 72 (various colours)

• **Aspiration hazard** Based on available data, the classification criteria are not met.

(Contd. of page 3)

12 SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 SECTION 14: Transport information

- | | |
|--|-----------------|
| • 14.1 UN-Number | |
| • ADR, ADN, IMDG, IATA | not applicable |
| • 14.2 UN proper shipping name | |
| • ADR, ADN, IMDG, IATA | not applicable |
| • 14.3 Transport hazard class(es) | |
| • ADR, ADN, IMDG, IATA | |
| • Class | not applicable |
| • 14.4 Packing group | |
| • ADR, IMDG, IATA | not applicable |
| • 14.5 Environmental hazards: | |
| • Marine pollutant: | No |
| • 14.6 Special precautions for user | Not applicable. |
| • 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| • UN "Model Regulation": | not applicable |

15 SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

(Contd. on page 5)

-EU-

Safety data sheet
according to 1907/2006/EC, Article 31



Page 5/5
Printing date 29.01.2019
Revision: 18.01.2018
Version number 2

Trade name: PF 61xx.1 Series; xx = 02, 52, 72 (various colours)

IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

(Contd. of page 4)

· *** Data compared to the previous version altered.**

EU

Safety data sheet

according to 1907/2006/EC, Article 31



Page 1/5

 Printing date 29.01.2019
 Revision: 18.01.2018
 Version number 32

**1 SECTION 1: Identification of the substance/mixture and of the company/
 undertaking**

- **1.1 Product identifier**
- **Trade name:** *PF 6lxx.1 Series; xx = 00, 10, 11, 20 (various colours)*
- **Article number:** 10000003316
- **Registration number**
The ingredients of this ink meet the criteria of the Regulation 1907/2006/EC (REACH).
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Currently no such applications are identified
- **Application of the substance / the mixture** *pigmented highlighter ink*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 DOKUMENTAL GmbH & Co KG
 Woellnerstraße 26
 D-67065 Ludwigshafen
 Phone + 49(0)621/37702 321
 Fax + 49(0)621/37702 391
 www.dokumental.de
- **Further information obtainable from:**
 Technical Service, Dr. B. Polzin
 Tel.: +49-621-37702 322
 Mobile +49-1726204412
 E-Mail: bernd.polzin@dokumental.de
- **1.4 Emergency telephone number:**
 GBK Gefahrgut Büro GmbH
 ++49 (0) 6132 / 84463
 Ingelheim, Deutschland

2 SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** *none*
- **Hazard pictograms** *none*
- **Signal word** *none*
- **Hazard statements** *none*
- **Additional information:**
 EUH208 Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.
 EUH210 Safety data sheet available on request.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** *Mixture of substances listed below with nonhazardous additions.*
- **Dangerous components:** *none*
- **Additional information:** *For the wording of the listed hazard phrases refer to section 16.*

4 SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** *No special measures required.*
- **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
- **After skin contact:** *Generally the product does not irritate the skin.*
- **After eye contact:** *Rinse opened eye for several minutes under running water.*
- **After swallowing:** *If symptoms persist consult doctor.*
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

-EU-

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31



Page 2/5
Printing date 29.01.2019
Revision: 18.01.2018
Version number 32

Trade name: PF 61xx.1 Series; xx = 00, 10, 11, 20 (various colours)

(Contd. of page 1)

5 SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

6 SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
No special measures required.
Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class:** 10
- **7.3 Specific end use(s)** No further relevant information available.

8 SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
If only a short-term loading of the glove material by splashes is expected, tricoted gloves with higher wearability for the better acceptance of the users are recommended.
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Nitrile rubber, NBR
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling

EU
(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31



Page 3/5
Printing date 29.01.2019
Revision: 18.01.2018
Version number 32

Trade name: PF 61xx.1 Series; xx = 00, 10, 11, 20 (various colours)

(Contd. of page 2)

9 SECTION 9: Physical and chemical properties

<ul style="list-style-type: none"> • 9.1 Information on basic physical and chemical properties • General Information • Appearance: <ul style="list-style-type: none"> Form: Fluid Colour: According to product specification • Odour: Product specific • Odour threshold: Not determined. 	
<ul style="list-style-type: none"> • Important information on protection of health and environment, and on safety. - 	
• pH-value at 20 °C:	7
<ul style="list-style-type: none"> • Change in condition <ul style="list-style-type: none"> Melting point/freezing point: Undetermined. Initial boiling point and boiling range: 100 °C 	
• Flash point:	160 °C
• Flammability (solid, gas):	Not applicable.
• Ignition temperature:	400 °C
• Decomposition temperature:	Not determined.
• Auto-ignition temperature:	Product is not selfigniting.
• Explosive properties:	Not determined.
<ul style="list-style-type: none"> • Explosion limits: <ul style="list-style-type: none"> Lower: 3.2 Vol % Upper: 53 Vol % 	
• Vapour pressure at 20 °C:	23 hPa
<ul style="list-style-type: none"> • Density at 20 °C: 1.1 g/cm³ • Relative density: Not determined. • Vapour density: Not determined. • Evaporation rate: Not determined. 	
• Solubility in / Miscibility with water:	Fully miscible.
• Partition coefficient: n-octanol/water:	Not determined.
<ul style="list-style-type: none"> • Viscosity: <ul style="list-style-type: none"> Dynamic at 20 °C: 5 mPas Kinematic: Not determined. 	
<ul style="list-style-type: none"> • Solvent content: <ul style="list-style-type: none"> Water: 63.2 % 	
<ul style="list-style-type: none"> • Solids content: 21.9 % 	
<ul style="list-style-type: none"> • 9.2 Other information <ul style="list-style-type: none"> The physical and chemical properties given in Section 9.1 are rough data only, which are partially derived from the component's data of the mixture. These data are no binding product specifications. 	

10 SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

(Contd. on page 4)
- EU -

Safety data sheet
according to 1907/2006/EC, Article 31



Page 4/5
Printing date 29.01.2019
Revision: 18.01.2018
Version number 32

Trade name: PF 61xx.1 Series; xx = 00, 10, 11, 20 (various colours)

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

(Contd. of page 3)

12 SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 SECTION 14: Transport information

- | | |
|--|-----------------|
| • 14.1 UN-Number | |
| • ADR, ADN, IMDG, IATA | not applicable |
| • 14.2 UN proper shipping name | |
| • ADR, ADN, IMDG, IATA | not applicable |
| • 14.3 Transport hazard class(es) | |
| • ADR, ADN, IMDG, IATA | |
| • Class | not applicable |
| • 14.4 Packing group | |
| • ADR, IMDG, IATA | not applicable |
| • 14.5 Environmental hazards: | |
| • Marine pollutant: | No |
| • 14.6 Special precautions for user | Not applicable. |
| • 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| • UN "Model Regulation": | not applicable |

15 SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

EU
(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31



Page 5/5
Printing date 29.01.2019
Revision: 18.01.2018
Version number 32

Trade name: PF 61xx.1 Series; xx = 00, 10, 11, 20 (various colours)

(Contd. of page 4)

16 SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

- * Data compared to the previous version altered.

EU

Safety Data Sheet**color pencil lead**

*Prepared according to American OSHA HazCom Standard (2012)

1 Identification of the chemical and supplier**Product identifier**

Product Name	color pencil lead
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Used for color pencil.
Uses advised against	Please consult manufacturer.

Details of the supplier of the Safety Data Sheet

Name of the company	Qing Yuan Lian Xing Pencils Lead Industry Co., Ltd.
Address of the company	Xinyao Industrial Zone, Qingyuan, Zhejiang, China
Post code	--
Telephone number	15057897773
Fax number	--
E-mail address	--

Emergency phone number

Emergency phone number	15057897773
------------------------	-------------

2 Hazards identification**Hazard classification according to GHS**

Hazard classification according to GHS	Not applicable
--	----------------

Label elements

Hazard pictograms	Not applicable
Signal word	Not applicable

Hazard statements

Hazard statements	Not applicable
-------------------	----------------

Precautionary statements

◆ Prevention

Prevention	Not applicable
------------	----------------

color pencil lead

◆ Response

Response	Not applicable
-----------------	----------------

◆ Storage

Storage	Not applicable
----------------	----------------

◆ Disposal

Disposal	Not applicable
-----------------	----------------

| **Other hazards**

	Not applicable
--	----------------

| **Hazard description**

◆ Physical and chemical hazards

	Solid, toxic smoke/fumes in a fire.
--	-------------------------------------

◆ Health hazards

Inhaled	Inhalation of the product may produce adverse health effects or irritation of the respiratory tract following discomfort.
Ingestion	Accidental ingestion of the product may be harmful to the health of the individual.
Skin Contact	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
Eye	This product may cause temporary discomfort following direct contact with the eye.

◆ Environmental hazards

	Please refer to 12th chapter of SDS.
--	--------------------------------------

3 Composition/information on ingredients

Component	Cas No.	EC No.	Concentration (weight percent, %)
Basic formula			
Talc	14807-96-6	238-877-9	20.0~50.0
Bentonite powder	1302-78-9	215-108-5	< 10.0
Zinc stearate	557-05-1	209-151-9	< 15.0
Carboxymethylcellulose sodium	9000-11-7	900-432-4	< 15.0
Hydrocarbon waxes	8002-74-2	232-315-6	< 10.0
Dyestuff			
Red			
Pigment Red 21	6410-26-0	229-096-4	5.0
Pink			
Calcium 4-[(4-chloro-3-sulphonatophenyl)]	7538-59-2	231-411-5	0.4

2 / 12

color pencil lead

azo]-3-hydroxy-2-naphthoate			
Rhodamine B	81-88-9	201-383-9	0.2
Orange			
Pigment Orange 13	3520-72-7	222-530-3	5.0
Lemon yellow			
Pigment Yellow 147	4118-16-5	223-912-2	5.5
Green			
Copper phthalocyanine	147-14-8	205-685-1	5.0
Pigment Green 7	1328-53-6	215-524-7	2.2
Pigment Yellow 147	4118-16-5	223-912-2	2.3
Green fruit			
Pigment Green 7	1328-53-6	215-524-7	2.5
Pigment Yellow 147	4118-16-5	223-912-2	4.2
Dark blue			
Copper phthalocyanine	147-14-8	205-685-1	5.0
Rhodamine B	81-88-9	201-383-9	0.3
Sky blue			
Copper phthalocyanine	147-14-8	205-685-1	1.3
Pale purple			
Pigment Violet 23	6358-30-1	228-767-9	2.2
Reddish brown			
Iron oxide	1332-37-2	215-570-8	4.5
Titanium oxide	1317-80-2	257-372-4	0.15
Garnet			
Pigment Red 63:1	6417-83-0	229-142-3	2.8
Pigment Red 21	6410-26-0	229-096-4	1.8
Pigment Yellow 147	4118-16-5	223-912-2	0.18
Titanium oxide	1317-80-2	257-372-4	0.15
Black			
Titanium oxide	1317-80-2	257-372-4	9.0

4 First aid measures

Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.

color pencil lead

Skin contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

| Most important symptoms and effects, both acute and delayed

1	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
---	--

| Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Firefighting measures

| Extinguishing media

Suitable extinguishing media	Use extinguishing media suitable for surrounding area.
Unsuitable extinguishing media	There is no restriction on the type of extinguisher which may be used.

| Specific hazards arising from the substance or mixture

1	Containers may explode when heated.
2	Fire exposed containers may vent contents through pressure relief valves.
3	May expansion or decompose explosively when heated or involved in fire.

| Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6 Accidental release measures

| Personal precautions, protective equipment and emergency procedures

1	Ensure adequate ventilation. Remove all sources of ignition.
2	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
3	Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

| Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.
3	Do not let product enter drains.
4	Prevent leakage into the water, sewer, basement or confined space.

| Methods and materials for containment and cleaning up

1	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a
---	--

color pencil lead

	spill by bunding.
2	Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
3	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7 Handling and storage

Precautions for handling

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with skin and eyes.
4	Keep away from heat/sparks/open flames/ hot surfaces.
5	Take precautionary measures against static discharges.

Precautions for storage

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/ hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

8 Exposure controls/personal protection

Control parameters

Occupational Exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m ³	ppm	mg/m ³
Talc 14807-96-6	USA - OSHA	20	-	-	-
	South Korea	-	2	-	-
	Latvia	-	4	-	-
	Ireland	-	10	-	-
	Denmark	-	0.3	-	0.6
	Australia	-	2.5	-	-
Zinc stearate 557-05-1	USA - OSHA	-	15	-	-
	USA - OSHA	-	5	-	-
	USA - NIOSH	-	10	-	-
	USA - NIOSH	-	5	-	-
	United Kingdom	-	4	-	-
	Switzerland	-	3	-	-
	South Korea	-	10	-	-
	Ireland	-	10	-	20

color pencil lead

	France	-	10	-	-
	France	-	10	-	-
	Canada - Québec	-	10	-	-
Hydrocarbon waxes 8002-74-2	USA - NIOSH	-	2	-	-
	United Kingdom	-	2	-	6
	South Korea	-	2	-	-
	Ireland	-	2	-	6
	Denmark	-	2	-	4
	Australia	-	2	-	-
Copper phthalocyanine 147-14-8	Latvia	-	5	-	-

◆ Biological limit values

Biological limit values	No information available
-------------------------	--------------------------

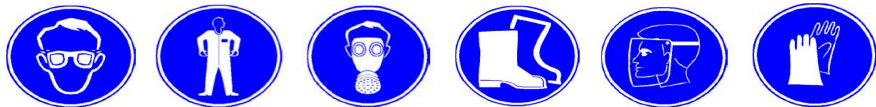
◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air (Series standard).

| Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

| Personal protection equipment

General requirement	
Eye protection	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US)).
Hand protection	Wear protective gloves (such as butyl rubber) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.
Respiratory protection	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and body protection	Wear fire/flame resistant/retardant clothing and antistatic boots.

9 Physical and chemical properties

| Physical and chemical properties

Appearance	Solid
Odor	No special odor
Odor threshold	No information available

color pencil lead

pH	Not soluble in water, no pH value
Melting point/freezing point(°C)	> 20
Initial boiling point and boiling range(°C)	> 35
Flash point(Closed cup, °C)	Not applicable
Evaporation rate	Not applicable
Flammability(solid, gas)	Not combustible
Upper/lower explosive limits[% (v/v)]	Upper limit : No information available ; Lower limit : No information available
Vapor pressure(kPa)	Not applicable
Vapor density(Air = 1)	Not applicable
Relative density(Water=1)	> 1
Solubility(mg/L)	Slightly soluble in water
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	> 100
Decomposition temperature(°C)	> 100
Viscosity(mm ² /s)	Not applicable

10 Stability and reactivity**| Stability and reactivity**

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	No information available
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	No information available
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information**| Acute toxicity**

Component	Cas No.	LD ₅₀ (oral)	LD ₅₀ (dermal)	LC ₅₀ (inhalation,4h)
Rhodamine B	81-88-9	887mg/kg(Mouse)	No information available	No information available
Pigment Orange 13	3520-72-7	> 5000mg/kg(Rat)	No information available	No information available
Calcium 4-[(4-chloro-3-sulphonatophenyl)azo]-3-hydroxy-2-naphthoate	7538-59-2	887mg/kg(Mouse)	No information available	No information available
Zinc stearate	557-05-1	> 10000mg/kg(Rat)	No information available	No information available

color pencil lead

Carcinogenicity

ID	Cas No.	Component	IARC	NTP
Basic formulas				
1	14807-96-6	Talc	Not Listed	Not Listed
2	1302-78-9	Bentonite powder	Not Listed	Not Listed
3	557-05-1	Zinc stearate	Not Listed	Not Listed
4	9000-11-7	Carboxymethylcellulose sodium	Not Listed	Not Listed
5	8002-74-2	Hydrocarbon waxes	Not Listed	Not Listed
Dyestuff				
Red				
6	6410-26-0	Pigment Red 21	Not Listed	Not Listed
Pink				
7	7538-59-2	Calcium 4-[(4-chloro-3-sulphonatophenyl)azo]-3-hydroxy-2-naphthoate	Not Listed	Not Listed
8	81-88-9	Rhodamine B	Category 3	Not Listed
Orange				
9	3520-72-7	Pigment Orange 13	Not Listed	Not Listed
Lemon yellow				
10	4118-16-5	Pigment Yellow 147	Not Listed	Not Listed
Green				
11	147-14-8	Copper phthalocyanine	Not Listed	Not Listed
12	1328-53-6	Pigment Green 7	Not Listed	Not Listed
13	4118-16-5	Pigment Yellow 147	Not Listed	Not Listed
Green fruit				
14	1328-53-6	Pigment Green 7	Not Listed	Not Listed
15	4118-16-5	Pigment Yellow 147	Not Listed	Not Listed
Dark blue				
16	147-14-8	Copper phthalocyanine	Not Listed	Not Listed
17	81-88-9	Rhodamine B	Category 3	Not Listed
Sky blue				
18	147-14-8	Copper phthalocyanine	Not Listed	Not Listed
Pale purple				
19	6358-30-1	Pigment Violet 23	Not Listed	Not Listed

color pencil lead

Reddish brown				
20	1332-37-2	Iron oxide	Not Listed	Not Listed
21	1317-80-2	Titanium oxide	Not Listed	Not Listed
Garnet				
22	6417-83-0	Pigment Red 63:1	Not Listed	Not Listed
23	6410-26-0	Pigment Red 21	Not Listed	Not Listed
24	4118-16-5	Pigment Yellow 147	Not Listed	Not Listed
25	1317-80-2	Titanium oxide	Not Listed	Not Listed
Black				
26	1317-80-2	Titanium oxide	Not Listed	Not Listed

Others

color pencil lead	
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Reproductive toxicity(additional)	Based on available data, the classification criteria are not met

12 Ecological information**Acute aquatic toxicity**

Component	Cas No.	Fish	Crustaceans	Algae
Bentonite powder	1302-78-9	LC ₅₀ : 19000mg/L (96h)(Fish)	No information available	No information available

Chronic aquatic toxicity

Chronic aquatic toxicity	No information available
---------------------------------	--------------------------

Others

Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	No information available
Results of PBT and vPvB assessment	The components of the product not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

color pencil lead

13 Disposal considerations**Disposal considerations**

Waste chemicals	If medical advice is needed, have product container or label at hand.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section 13.1 and 13.2.

14 Transport information**Label and Mark**

Transporting Label	Not applicable
---------------------------	----------------

IMDG-CODE

IMDG-CODE	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
------------------	--

ICAO/IATA-DG

ICAO/IATA-DG	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
---------------------	--

UN-ADR

UN-ADR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
---------------	--

15 Regulatory information**International chemical inventory**

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Basic formulas									
Talc	✓	✓	✓	✓	✓	✓	✓	✓	✗
Bentonite powder	✓	✓	✓	✓	✓	✓	✓	✓	✗
Zinc stearate	✓	✓	✓	✓	✓	✓	✓	✓	✓
Carboxymethylcellulose sodium	✗	✓	✓	✓	✓	✓	✗	✓	✓
Hydrocarbon waxes	✓	✓	✓	✓	✓	✓	✓	✓	✗
Dyestuff									
Red									
Pigment Red 21	✓	✓	✗	✗	✗	✗	✗	✗	✗
Pink									
Calcium 4-[(4-chloro-3-sulphonatophenyl)azo]-3-hydroxy-2-naphthoate	✓	✓	✓	✗	✗	✓	✗	✓	✓
Rhodamine B	✓	✓	✓	✓	✓	✓	✓	✓	✓
Orange									

color pencil lead

Pigment Orange 13	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lemon yellow										
Pigment Yellow 147	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Green										
Copper phthalocyanine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pigment Green 7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pigment Yellow 147	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Green fruit										
Pigment Green 7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pigment Yellow 147	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dark blue										
Copper phthalocyanine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rhodamine B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sky blue										
Copper phthalocyanine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pale purple										
Pigment Violet 23	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗
Reddish brown										
Iron oxide	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Titanium oxide	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Garnet										
Pigment Red 63:1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pigment Red 21	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗
Pigment Yellow 147	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Titanium oxide	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Black										
Titanium oxide	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

- 【EINECS】** European Inventory of Existing Commercial Chemical Substances
【TSCA】 United States Toxic Substances Control Act Inventory
【DSL】 Canadian Domestic Substances List
【IECSC】 China Inventory of Existing Chemical Substances
【NZIoC】 New Zealand Inventory of Chemicals
【PICCS】 Philippines Inventory of Chemicals and Chemical Substances
【KECI】 Existing and Evaluated Chemical Substances
【AICS】 Australia Inventory of Chemical Substances
【ENCS】 Existing And New Chemical Substances

16 Others

color pencil lead

Information on revision

Creation Date	2016/06/27
Revision Date	2016/06/27
Reason for revision	-

Reference

- [1]IPCS:The International Chemical Safety Cards (ICSC) ,website: <http://www.ilo.org/dyn/icsc/showcard.home>.
- [2]IARC , website: <http://www.iarc.fr/>.
- [3]OECD: The Global Portal to Information on Chemical Substances, website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en.
- [4]CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.
- [5]NLM:ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.
- [6]EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.
- [7]U.S. Department of Transportation:ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.
- [8]Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

Abbreviations and acronyms

CAS –Chemical Abstracts Service	CMR - Carcinogens, mutagens or substances toxic to reproduction
PC-STEL - Short term exposure limit	PC-TWA - Time Weighted Average
DNEL - Derived No Effect Level	IARC - International Agency for Research on Cancer
RPE - Respiratory Protective Equipment	PNEC –Predicted No Effect Concentration
LC₅₀ - Lethal Concentration 50%	LD₅₀ - Lethal Dose 50%
NOEC -No Observed Effect Concentration	EC₅₀ - Effective Concentration 50%
PBT - Persistent, Bioaccumulative, Toxic	POW - Partition coefficient Octanol:Water
BCF - Bioconcentration factor (BCF)	vPvB - very Persistent, very Bioaccumulative
IMDG -International Maritime Dangerous Goods	ICAO/IATA -International Civil Aviation Organization/International Air Transportation Association
UN -The United Nations	ACGIH -American Conference of Governmental Industrial Hygienists
NFPA -National Fire Protection Association	OECD -Organization for Economic Co-operation and Development

Disclaimer

This Safety Data Sheet (SDS) was prepared according to OSHA HazCom Standard (2012). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user' s reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

General Terms and Conditions
of TÜV SÜD Certification and Testing (China) Co., Ltd. and its affiliated branch offices in the P.R.C.
(hereinafter referred to as *the company*)



1. General Information and Definitions

- (1.1) In the event that an order for any services is placed, the Client shall accept the General Terms and Conditions. The General Terms and Conditions shall be applicable to all orders, resulting contracts and other arrangements, including all offers made or services provided by the Company or any of its affiliated companies. They are not applicable if and as far as they are in conflict with the regulations on services performed on behalf of governments, government bodies or any other public entity, or they are in conflict with mandatory provisions of local law. The Client's placement of orders as well as the conclusion of contracts with the Company shall be regarded as awareness and acceptance of these General Terms and Conditions.
- (1.2) The Company strongly recommends any Client or potential Client to read the full text of these General Terms and Conditions prior to placement of any order to or conclusion of any contract with the Company. Ancillary agreements, promises and other statements made on the part of the Company staff or the experts called upon by them shall be binding only if they are expressly confirmed by the Company in writing. This shall also apply to any modifications of this clause.

2. Provision of Services

- (2.1) With due care and skill, the Company will provide services according to Client's specific instructions as made available by the Client. In the absence of Client's specific instructions, the following is deemed as instructions given to the Company:
- (a) The terms of any standard specification sheet or standard order form provided by the Company; and/or
- (b) Any relevant usage, practice or trade custom; and/or
- (c) Such methods the Company considers technically, operationally and/or on financial grounds appropriate.
- (2.2) No authority is entitled to give any instructions particularly on the scope and type of the services or the reports delivered, or on the resulting certificates (the "Reports of Findings"), unless the Company receives prior written instructions to the contrary from the Client. The Client hereby irrevocably authorizes the Company to deliver Reports of Findings to a third party where so instructed by the Client or, at the Company's discretion, where it implicitly follows from circumstances, trade custom, usage or practice.
- (2.3) The information stated in the Report of Findings is derived from the results of inspection or testing procedures carried out in accordance with the instructions and/or Company's assessment of such results on the basis of any technical standards, trade custom or practice, or other circumstances which should in Company's professional experience be taken into account.
- (2.4) Reports of Findings issued after the testing of samples refer to the Company's opinion only on samples under testing and not to the lot from which the samples were drawn.
- (2.5) Client agrees that the Company's sole responsibility is to be present at the time of the third party's intervention and to forward the results, or confirm the occurrence of the intervention, in case Client requests the Company to witness any third party's intervention. Client agrees that the Company will use the test methods for analysis as requested in the request form, and if none is stated in the form, the Company will choose the appropriate test methods for analysis.
- (2.6) The Reports of Findings issued by the Company will reflect the facts as recorded by it at the time of its intervention only and within the limits of the instructions received or, in the absence of such instructions, within the limits of the alternative parameters applied as provided for in Clause 2.1. The Company is under no obligation to refer to, or report upon, any facts or circumstances, which are outside the specific instructions received or alternative parameters applied.
- (2.7) The performance of all or part of the services may be delegated to an agent or subcontractor by the Company. The Client authorizes the Company to disclose all information necessary for such performance to the agent or subcontractor.
- (2.8) Documents reflecting engagements contracted between the Client and third parties or third party documents, e.g. sales contract copies, letters of credit, bills of lading, etc. should be made available to the Company. These are considered to be for information only, and do not extend or restrict the scope of the services or the obligations accepted by the Company.
- (2.9) The Company agrees that, by providing the services to the Client, it neither takes the place of Client or any third party, nor otherwise assumes, abridges, abrogates or undertakes to discharge any duty of the Client to any third party or that of any third party to the Client. Also, it does not release the Client or any third party from any of their obligations.
- (2.10) Depending on the nature of each sample, all samples given to the Company shall be retained for a period of 3 months or for such other shorter time period as the nature of the sample permits, and then sent back to Client or otherwise disposed of at the Company's discretion. After that time the Company will not be responsible for the samples. Storage of samples for more than 3 months shall incur a storage fee payable by the Client. If samples are returned to the Client, the Client will be billed a handling and freight fees. Special disposal charges will be billed to the Client if incurred.

3. Client's Obligations

The Client shall:

- (3.1) ensure that all required supporting documents, information and instructions as submitted are accurate, trueful and complete. These information are to be submitted in a timely not later than 2 working days from the date of which the services are requested by the Client.
- (3.2) ensure to give all necessary access for the Company's representatives to the premises where the services are to be performed and to take all necessary steps to eliminate or remedy any obstacles to, or interruptions in the performance of the services;
- (3.3) make available any special equipment and personnel necessary for the performance of the services, if required;
- (3.4) ensure that for the safety and security of working conditions, sites and installations, all necessary measures are taken during the performance of services. In this respect, the Client will not rely on the Company's advice whether required or not;
- (3.5) inform the Company of any known hazards or dangers, actual or potential, associated with any order, samples, testing or any other service rendered by the Company well in advance. Those are, but are not limited to the presence or risk of radiation, environmental pollution or poisons-toxic or noxious or explosive elements or materials;
- (3.6) fully exercise all its rights and discharge all its liabilities under any relevant laws or other contract with a third party.

4. Fees and Payment

- (4.1) All Fees not agreed on between the Company and Client at the time the order is placed or a contract is concluded shall be determined by the Company's Schedule of Fees (which are subject to change). All applicable taxes shall be paid by Client, as far as mandatory laws do not provide otherwise.
- (4.2) Unless a specific period is established in the invoice, the Client shall pay upon receiving the invoice, but not later than 30 days from the relevant invoice date or within such other period as may be established by the Company in the invoice (the "Due Date").
- (4.3) The Client shall not be entitled to retain or defer due payment of any sums to the Company on account of any dispute, counter claim or set-off against the Company. The Company reserves the right to retain or defer any due payments if any dispute arises with or it raises any counterclaim against the Client. The Company is entitled to set-off due payments against payments of the Client.

- (4.4) For the collection of unpaid fees, the Company may decide to bring action in any court with competent jurisdiction. The corresponding collection costs, including attorney's fees and related costs, shall be borne by the Client, as far as the mandatory local law does not provide otherwise.
- (4.5) In case of any unforeseen problems or expenses arise while carrying out the services, the Company informs the Client. In such cases, the Company shall be entitled to charge additional fees to cover extra time and to invoice extra costs necessarily incurred to complete the services.
- (4.6) If the Company is unable to perform all or parts of the services for any cause whatsoever beyond the Company's control, including the failure by Client to comply with any of its obligations provided for in the foregoing Clause 3, the Company shall nevertheless be entitled to payments of:
- (1) The amount of all non-refundable expenses incurred by the Company; and
- (2) A proportion of the agreed fee equal to the proportion of the services actually carried out.

5. Suspension or Termination of Services

In any case mentioned below, the Company shall be entitled to either suspend or terminate the provision of the services immediately and without any liability:

- (5.1) Failure by the Client to comply with any of its obligations under these General Terms and Conditions and such failure is not remedied within 10 days after a notice of such failure has been delivered to the Client; or
- (5.2) Any suspension of payment, arrangement with creditors, bankruptcy, insolvency, receivership or cessation of business by Client.

6. Liability and Indemnification

(6.1) Limitation of Liability

- (1) Clients seeking a guarantee against loss or damage should obtain appropriate insurance. The Company is neither an insurer nor a guarantor and disclaims all liability in such capacity.
- (2) Reports of Findings are issued on the basis of the information, documents and/or samples provided by, or on behalf of the Client and solely for the benefit of the Client who is obliged to act on the basis of such Reports of Findings. Neither the Company nor any of its staff, agents or subcontractors shall be liable to the Client or to any third party for any actions taken or not taken on the basis of such Reports of Findings, or for any incorrect results arising from unclear, erroneous, incomplete, misleading or false information provided to the Company.
- (3) For any delayed, total or partial non-performance of the services arising directly or indirectly from any event beyond the Company's control, including failure by Client to comply with any of its obligations hereunder, the Company shall not be liable.
- (4) The liability of the Company in respect of any claim for loss, damage or expense of any nature and howsoever arising shall in no circumstances exceed a total aggregate sum equal to 10 times the amount of the fee paid in respect of the specific service which gives rise to such claim, and shall in any case not exceed the equivalent of 25,000 EUR in CNY.
- (5) For any indirect or consequential loss (including loss of profits), the Company shall not have any liabilities.
- (6) In case of any claim, the Client must give written notice to the Company within 30 days of discovery of the facts with all necessary documents to justify such claim. In any case, the Company shall be discharged from all liability for all claims for loss, damage or expense unless a lawsuit is brought within two years from:
- (i) the performance date of the Company for its services which refers to the claim; or
- (ii) the date when the service should have been completed in the event of any alleged non-performance.

- (6.2) **Indemnification:** Against all claims (actual or threatened) by any third party for loss, damage or expenses of whatsoever nature including all legal expenses and related costs and howsoever arising relating to the performance, purported performance or non-performance of any services, the Client shall guarantee, hold harmless and indemnify the Company and its officers, employees, agents or subcontractors.

7. Obligation of Confidentiality, Copyright, Data Privacy Protection

- (7.1) The Company shall be authorized to make file copies of written documents, which have been made available to it for review and which are important for processing the order.
- (7.2) Insofar as Reports of Findings are prepared in the course of processing the order and which are subject to the protection of copyright, then the Company shall grant the Client a simple, non-transferable right to use, insofar as this is necessary and in accordance with the contractually presupposed purpose. Other rights shall not be transferred; in particular, the customer shall not be entitled to modify and/or edit audit reports or to make use of such outside of his business premises.
- (7.3) The Company and its staff which may be called in shall not disclose or use trade and business matters about which they have gained knowledge during the performance of their work without proper authorization, or unless instructed by a court or authorized body (e.g. regulatory authority, accreditation body or certification scheme owner) or otherwise legally required.

8. Miscellaneous

- (8.1) The validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired, even if any one or more provisions of these General Conditions are found to be illegal or unenforceable in any respect.
- (8.2) Client shall not directly or indirectly entice, encourage or make any offer to Company's employees to leave their employment with the Company, during the course of providing the services and for a period of one year thereafter.
- (8.3) Use of the Company's corporate name or registered marks for advertising purposes is not permitted without the Company's prior written authorization.

9. Governing Law, Jurisdiction and Dispute Settlement

- (9.1) Unless specifically agreed otherwise, all disputes arising out of or in connection with contractual relationship(s) hereunder shall be governed by the applicable laws and regulations of the People's Republic of China.
- (9.2) Place of performance for any obligation arising out of this contract shall be Shanghai, the Place of the TÜV SÜD Certification and Testing (China) Co., Ltd., Shanghai branch, unless otherwise expressly agreed by the parties.

10. Languages

In the event of any discrepancy between the English and the Chinese version of these General Terms and Conditions, the English version shall prevail.