

76331-1023

Safety Data Sheet**Color lead**

*Prepared according to EU regulation No. 2015/830

1 Identification of the substance/mixture and of the company/undertaking**Product identifier**

Product Name	Color lead
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable
REACH Registration Number	Not applicable

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

Relevant identified uses	The color lead is used in pencils. The age range is 3 years old or older.
Uses advised against	Please consult manufacturer.

Details of the supplier of the Safety Data Sheet

Name of the company	Zhe Jiang Lian xing stationery Co., Ltd.
Address of the company	Xinyao Industrial Zone, Qingyuan, Zhejiang, China.
Post code	/
Telephone number	+86 578 6134128
Fax number	+86 578 6134608
E-mail address	1150019931@qq.com

Emergency phone number

Emergency phone number	/
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2 Hazards identification**CLP classification according to Regulation (EC) No. 1272/2008**

According to Regulation (EC) No 1272/2008 and its amendments. Not classified as a dangerous substance.

Label elements

Hazard pictograms	Not applicable
Signal word	Not applicable

Hazard statements

Hazard statements	Not applicable
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Precautionary statements

- ◆ Prevention

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Prevention	Not applicable
◆ Response	
Response	Not applicable
◆ Storage	
Storage	Not applicable
◆ Disposal	
Disposal	Not applicable
Other hazards	
	Not applicable

3 Component

Component	Cas No.	EC No.	Index No.	Hazard classification according to CLP	Concentration (weight percent, %)
kaolin clay	1332-58-7	265-064-6	-	Not Classified	Commercial secret
Zinc distearate	557-05-1	209-151-9	-	Hazardous To The Aquatic Environment – Short-Term (Acute) Hazard , Category 1 , H400	Commercial secret
Carboxymethylcellulose Sodium	9004-32-4	900-432-4	-	Not Classified	Commercial secret
wax	8002-74-2	232-315-6	-	Not Classified	Commercial secret
Red					
C.I.P.R. 21	6410-26-0	229-096-4	-	Not Classified	Commercial secret
Light pink					
C.I.P.R. 57:1	5281-04-9	226-109-5	-	Not Classified	Commercial secret
C.I. Pigment White 6	13463-67-7	236-675-5	-	Not Classified	Commercial secret
Orange					
C.I.P.O. 13	3520-72-7	222-530-3	-	Not Classified	Commercial secret
Yellow					
C.I.P.Y. 12	6358-85-6	228-787-8	-	Not Classified	Commercial secret
C.I. Pigment White 6	13463-67-7	236-675-5	-	Not Classified	Commercial secret
Cyan green					
C.I.P.G. 7	1328-53-6	215-524-7	-	Not Classified	Commercial secret
C.I.P.Y. 14	5468-75-7	226-789-3	-	Not Classified	Commercial secret
C.I.P.B. 15:0	147-14-8	205-685-1	-	Not Classified	Commercial secret
C.I. Pigment White 6	13463-67-7	236-675-5	-	Not Classified	Commercial secret
Dark yellow green					

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C.I.PY 14	5468-75-7	226-789-3	-	Not Classified	Commercial secret
C.I.PG 7	1328-53-6	215-524-7	-	Not Classified	Commercial secret
Carbon black	1333-86-4	215-609-9	-	Not Classified	Commercial secret
C.I. Pigment White 6	13463-67-7	236-675-5	-	Not Classified	Commercial secret
Light blue					
C.I.PB 15:3	147-14-8	205-685-1	-	Not Classified	Commercial secret
C.I. Pigment White 6	13463-67-7	236-675-5	-	Not Classified	Commercial secret
Pale Royal Blue					
C.I.PB 15:3	147-14-8	205-685-1	-	Not Classified	Commercial secret
C.I.PV 1	1326-03-0	215-413-3	-	Hazardous To The Aquatic Environment – Long-Term (Chronic) Hazard , Category 1 , H410	Commercial secret
Deep violet					
C.I.PV 23	6358-30-1	228-767-9	-	Not Classified	Commercial secret
C.I.PB 15:0	147-14-8	205-685-1	-	Not Classified	Commercial secret
light beige					
C.I.PY 12	6358-85-6	228-787-8	-	Not Classified	Commercial secret
C.I.PR 21	6410-26-0	229-096-4	-	Not Classified	Commercial secret
C.I. Pigment White 6	13463-67-7	236-675-5	-	Not Classified	Commercial secret
Red coffee					
C.I.PR 21	6410-26-0	229-096-4	-	Not Classified	Commercial secret
C.I.PY 14	5468-75-7	226-789-3	-	Not Classified	Commercial secret
Carbon black	1333-86-4	215-609-9	-	Not Classified	Commercial secret
Black					
Carbon black	1333-86-4	215-609-9	-	Not Classified	Commercial secret

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.
Skin contact	No harm in general situation. Wash off with water 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.

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I Most important symptoms and effects, both acute and delayed

- | | |
|---|------------------------|
| 1 | Please see section 11. |
|---|------------------------|

I Indication of any immediate medical attention and special treatment needed

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|---|--------------------------|
| 1 | Treat symptomatically. |
| 2 | Symptoms may be delayed. |

5 Firefighting measures**I 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.

I Specific hazards arising from the substance or mixture

- | | |
|---|---|
| 1 | Not combustible, not considered a significant fire risk, however containers may burn. |
| 2 | Development of hazardous combustion gases or vapor possible in the event of fire. |

I Advice for firefighters

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|---|---|
| 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**I Personal precautions, protective equipment and emergency procedures**

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|---|---|
| 1 | Ensure adequate ventilation. |
| 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. |

I Environmental precautions

- | | |
|---|---|
| 1 | Prevent further leakage or spillage if safe to do so. |
| 2 | Do not let product enter drains. |

I Methods and materials for containment and cleaning up

- | | |
|---|---|
| 1 | Use clean, non-sparking tools to collect absorbed material. |
| 2 | Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. |
| 3 | Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. |

7 Handling and storage**I Precautions for handling**

◆ Protective measures

- | | |
|---|---|
| 1 | Handling is performed in a well ventilated place. |
| 2 | Avoid contact with eyes. |

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◆ Measures to prevent fire

1	Keep away from heat/sparks/open flames/ hot surfaces.
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◆ Measures to prevent aerosol and dust generation

1	Avoid formation of dust and aerosols.
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2	Provide appropriate exhaust ventilation at places where dust is formed.
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◆ Advice on general occupational hygiene

1	Wash hands and face after using of the substances.
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2	Replace the contaminated clothing immediately.
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Conditions for safe storage, including any incompatibilities

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

1	In addition to use mentioned in the first parts, unforeseen other specific end uses.
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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
kaolin clay 1332-58-7	USA - OSHA	-	15	-	-
	South Korea	-	2	-	-
	Ireland	-	2	-	-
	France	-	10	-	-
	Denmark	-	2	-	4
	Australia	-	10	-	-
Zinc distearate 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
	France	-	10	-	-

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	France	-	10	-	-
	Canada - Québec	-	10	-	-
wax 8002-74-2	USA - NIOSH	-	2	-	-
	United Kingdom	-	2	-	6
	South Korea	-	2	-	-
	Ireland	-	2	-	6
	Denmark	-	2	-	4
	Australia	-	2	-	-
C.I. Pigment White 6 13463-67-7	USA - OSHA	-	15	-	-
	South Korea	-	10	-	-
	Ireland	-	10	-	-
	France	-	11	-	-
	Denmark	-	6	-	12
	Australia	-	10	-	-
CIPB 15:0 147-14-8	Latvia	-	5	-	-
Carbon black 1333-86-4	USA - OSHA	-	3.5	-	-
	South Korea	-	3.5	-	-
	Ireland	-	3.5	-	7
	France	-	3.5	-	-
	Denmark	-	3.5	-	7
	Australia	-	3	-	-

◆ 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).

◆ Derived No effect level(DNEL)

Component	Route of exposure	DNEL for Workers			
		Acute effects(local)	Acute effects(systemic)	Chronic effects(local)	Chronic effects(systemic)
Zinc distearate 557-05-1	Inhalation	No data available	No data available	No data available	44.0789mg/m ³
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
CIPR 57:1 5281-04-9	Inhalation	No data available	No data available	No data available	4.4 mg/m ³
	Oral	No data available	No data available	No data available	No data available

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9 Physical and chemical properties**Physical and chemical properties**

Appearance	Colored solid, each lead has a weight of 1.8g to 2.0g and is used in pencils
Odor	Odorless
Odor threshold	No information available
pH	Not soluble in water, no pH value
Melting point/freezing point(°C)	No information available
Initial boiling point and boiling range(°C)	No information available
Flash point(Closed cup, °C)	Not applicable
Evaporation rate	Not applicable
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	Upper limit : No information available ; Lower limit : No information available
Vapor pressure	Not applicable
Vapor density(Air = 1)	Not applicable
Relative density(Water=1)	No information available
Solubility(mg/L)	Insoluble in water
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	No information available
Decomposition temperature(°C)	No information available
Viscosity(mm ² /s)	Not applicable
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

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	Strong oxidizing agent.
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)
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C.I.P.O. 13	3520-72-7	> 5000mg/kg(Rat)	No information available	No information available
Carboxymethylcellulose Sodium	9004-32-4	27000mg/kg(Rat)	> 2000mg/kg(Rabbit)	> 5.8mg/L(Rat)
C.I.P.Y. 12	6358-85-6	> 10800mg/kg(Rat)	No information available	No information available
C.I.P.Y. 14	5468-75-7	> 5000mg/kg(Rat)	No information available	No information available
Carbon black	1333-86-4	> 15400mg/kg(Rat)	> 3000mg/kg(Rabbit)	No information available
Zinc distearate	557-05-1	> 10000mg/kg(Rat)	No information available	No information available

Carcinogenicity

ID	Cas No.	Component	IARC	NTP
1	1332-58-7	kaolin clay	Not Listed	Not Listed
2	557-05-1	Zinc distearate	Not Listed	Not Listed
3	9004-32-4	Carboxymethylcellulose Sodium	Not Listed	Not Listed
4	8002-74-2	wax	Not Listed	Not Listed
5	6410-26-0	C.I.P.R. 21	Not Listed	Not Listed
6	5281-04-9	C.I.P.R. 57:1	Not Listed	Not Listed
7	13463-67-7	C.I. Pigment White 6	Category 2B	Not Listed
8	3520-72-7	C.I.P.O. 13	Not Listed	Not Listed
9	6358-85-6	C.I.P.Y. 12	Not Listed	Not Listed
10	1328-53-6	C.I.P.G. 7	Not Listed	Not Listed
11	5468-75-7	C.I.P.Y. 14	Not Listed	Not Listed
12	147-14-8	C.I.P.B. 15:0	Not Listed	Not Listed
13	1333-86-4	Carbon black	Category 2B	Not Listed
14	147-14-8	C.I.P.B. 15:3	Not Listed	Not Listed
15	1326-03-0	C.I.P.V. 1	Not Listed	Not Listed
16	6358-30-1	C.I.P.V. 23	Not Listed	Not Listed

Others

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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

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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
Carboxymethylcellulose Sodium	9004-32-4	No information available	EC ₅₀ : 87.3mg/L (48h)(Crustaceans)	No information available

Chronic aquatic toxicity

Chronic aquatic toxicity	No information available
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Persistence and degradability

Component	Cas No.	Persistence (water/soil)	Persistence (air)
kaolin clay	1332-58-7	High	High
C.I. Pigment White 6	13463-67-7	High	High
C.I.P.B 15:0	147-14-8	High	High
C.I.P.Y 14	5468-75-7	High	High
Zinc distearate	557-05-1	Low	Low
C.I.P.Y 12	6358-85-6	High	High

Bioaccumulative potential

Component	Cas No.	Bioaccumulative potential	comments
C.I.P.G 7	1328-53-6	Low	BCF=74
kaolin clay	1332-58-7	Low	BCF=10
C.I. Pigment White 6	13463-67-7	Low	BCF=10
C.I.P.B 15:0	147-14-8	Low	BCF=33
C.I.P.O 13	3520-72-7	Low	BCF=5.6
C.I.P.R 57:1	5281-04-9	Low	BCF=7
C.I.P.Y 14	5468-75-7	Low	BCF=4.9
Zinc distearate	557-05-1	Low	Log K _{ow} =1.2
C.I.P.Y 12	6358-85-6	Low	BCF=5.4

Mobility in soil

Component	Cas No.	Mobility in soil	Soil Organic Carbon-Water Partitioning Coefficient (K _{oc})
kaolin clay	1332-58-7	Low	23.74
C.I. Pigment White 6	13463-67-7	Low	23.74

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C.L.P.B 15:0	147-14-8	Low	10000000000
C.L.P.Y 14	5468-75-7	Low	217800
Zinc distearate	557-05-1	Low	11670
C.L.P.Y 12	6358-85-6	Low	79680

Results of PBT and vPvB assessment

Component	Cas No.	Results of PBT and vPvB assessment (according to (EC) No 2015/830)
kaolin clay	1332-58-7	not PBT/vPvB
Zinc distearate	557-05-1	not PBT/vPvB
Carboxymethylcellulose Sodium	9004-32-4	not PBT/vPvB
wax	8002-74-2	not PBT/vPvB
C.L.P.R 21	6410-26-0	not PBT/vPvB
C.L.P.R 57:1	5281-04-9	not PBT/vPvB
C.I. Pigment White 6	13463-67-7	not PBT/vPvB
C.L.P.O 13	3520-72-7	not PBT/vPvB
C.L.P.Y 12	6358-85-6	not PBT/vPvB
C.L.P.G 7	1328-53-6	not PBT/vPvB
C.L.P.Y 14	5468-75-7	not PBT/vPvB
C.L.P.B 15:0	147-14-8	not PBT/vPvB
Carbon black	1333-86-4	not PBT/vPvB
C.L.P.B 15:3	147-14-8	not PBT/vPvB
C.L.P.V 1	1326-03-0	not PBT/vPvB
C.L.P.V 23	6358-30-1	not PBT/vPvB

13 Disposal considerations

Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
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
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IMDG-CODE

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IMDG-CODE	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
ICAO/IATA-DGR	
ICAO/IATA-DGR	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
kaolin clay	✓	✓	✓	✓	✓	✓	✓	✓	✗
Zinc distearate	✓	✓	✓	✓	✓	✓	✓	✓	✓
Carboxymethylcellulose Sodium	✗	✓	✓	✓	✓	✓	✓	✓	✓
wax	✓	✓	✓	✓	✓	✓	✓	✓	✗
C.I.P.R. 21	✓	✓	✗	✗	✗	✗	✗	✗	✗
C.I.P.R. 57:1	✓	✓	✓	✓	✓	✓	✗	✓	✓
C.I. Pigment White 6	✓	✓	✓	✓	✓	✓	✓	✓	✓
C.I.P.O. 13	✓	✓	✓	✓	✓	✓	✓	✓	✓
C.I.P.Y. 12	✓	✓	✓	✓	✓	✓	✓	✓	✓
C.I.P.G. 7	✓	✓	✓	✓	✓	✓	✓	✓	✓
C.I.P.Y. 14	✓	✓	✓	✓	✓	✓	✓	✓	✓
C.I.P.B. 15:0	✓	✓	✓	✓	✓	✓	✓	✓	✓
Carbon black	✓	✓	✓	✓	✓	✓	✓	✓	✗
C.I.P.B. 15:3	✓	✓	✓	✓	✓	✓	✓	✓	✓
C.I.P.V. 1	✓	✓	✓	✓	✓	✓	✓	✓	✓
C.I.P.V. 23	✓	✓	✓	✓	✓	✓	✓	✓	✗

【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

European chemical inventory

Component	A	B	C	D	E	F	G
kaolin clay	✗	✗	✓	✓	✓	✗	✗

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Zinc distearate	x	x	x	✓	✓	x	x
Carboxymethylcellulose Sodium	x	x	x	✓	x	x	x
wax	x	x	x	✓	✓	x	x
C.I.P.R 21	x	x	x	✓	x	x	x
C.I.P.R 57:1	x	x	x	✓	✓	x	x
C.I. Pigment White 6	x	x	x	✓	✓	✓	x
C.I.P.O 13	x	x	x	✓	✓	x	x
C.I.P.Y 12	x	x	x	✓	✓	x	x
C.I.P.G 7	x	x	x	✓	✓	x	x
C.I.P.Y 14	x	x	x	✓	✓	x	x
C.I.P.B 15:0	x	x	x	✓	✓	x	x
Carbon black	x	x	x	✓	✓	x	x
C.I.P.B 15:3	x	x	x	✓	✓	x	x
C.I.P.V 1	x	x	x	✓	x	x	x
C.I.P.V 23	x	x	x	✓	✓	x	x

[A] Candidate list of Substances of Very High Concern for authorization under EU REACH regulation

[B] Substances requiring authorisation under EU REACH regulation

[C] Substances restricted under EU REACH

[D] Pre-registered substances under EU REACH

[E] Registered substances under EU REACH

[F] Substance Evaluation – CoRAP under EU REACH

[G] List of priority substances under EU water policy (Directive 2455/2001/EC)

Note

"✓" Indicates that the substance included in the regulations

"x" That no data or included in the regulations

16 Others

Information on revision

Creation Date	2019/05/15
Revision Date	2019/05/15
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=08&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>.

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[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
LC ₅₀ - Lethal Concentration 50%	LD ₅₀ - Lethal Dose 50%
NOEC -No Observed Effect Concentration	EC ₅₀ - 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 REACH Regulation. 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.

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