



Trade name: edding permanent ink (black) contained in: edding 400

Current version : 9.2.0, issued: 26.02.2020

Replaced version: 9.1.0, issued: 28.06.2018

Region: GB

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

1.1 Product identifier

Trade name

edding permanent ink (black) contained in: edding 400

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

Relevant identified uses of the substance or mixture

Refill ink

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address

edding International GmbH

Bookkoppel 7

D-22926 Ahrensburg

Telephone no. +49 (0) 41 02 / 80 8-0

Information provided by / telephone

+49 (0)4102 - 808-0

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)30 30686 790 (Giftnotruf Berlin)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)

Eye Irrit. 2; H319

Flam. Liq. 2; H225

STOT SE 3; H336

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS02



GHS07

Signal word

Danger

Hazardous component(s) to be indicated on label:

1-methoxy-2-propanol

Hazard statement(s)



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H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
Precautionary statement(s)	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
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.
P370+P378	In case of fire: Use water spray, extinguishing powder, foam or CO2 to extinguish.
P405	Store locked up.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization

Mixture (preparation)

Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration
			%
1	ethanol		
	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 25.00 - < 50.00 % -b.w.
2	1-methoxy-2-propanol		
	107-98-2 203-539-1 603-064-00-3 01-2119457435-35-0034	Flam. Liq. 3; H226 STOT SE 3; H336	>= 25.00 - < 50.00 % -b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Eye Irrit. 2; H319: C >= 50%	-	-

3.3 Other information

The data subject of this Material Safety Data sheet refer to the ink contained in this product (marker).

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

Wash off immediately with soap and water.



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After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Rinse out mouth and give plenty of water to drink. Call a doctor immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam; Extinguishing powder; Carbon dioxide; Water spray jet

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Cool endangered containers with water spray jet. Suppress gases/vapours/mists with water spray jet. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away sources of ignition.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g., sand, kieselguhr, universal binder). Send in suitable containers for recovery or disposal.

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid formation of aerosols.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Do not inhale vapours. Clean skin thoroughly after work; apply skin cream.

Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Take precautionary measures against static charges. Keep away from sources of heat and ignition. Use explosion-proof equipment/fittings and non-sparking tools.



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7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
List of approved workplace exposure limits (WELs) / EH40			
Ethanol			
	WEL long-term (8-hr TWA reference period)	1920 mg/m ³	1000 ppm
2	1-methoxy-2-propanol	107-98-2	203-539-1
2000/39/EC			
1-Methoxypropanol-2			
	WEL short-term (15 min reference period)	568 mg/m ³	150 ppm
	WEL long-term (8-hr TWA reference period)	375 mg/m ³	100 ppm
	Skin resorption / sensibilisation	Skin	
List of approved workplace exposure limits (WELs) / EH40			
1-Methoxypropan-2-ol			
	WEL short-term (15 min reference period)	560 mg/m ³	150 ppm
	WEL long-term (8-hr TWA reference period)	375 mg/m ³	100 ppm
	Comments	Sk	

DNEL, DMEL and PNEC values

DNEL values (worker)

DNEL values (worker)					
No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	ethanol			64-17-5 200-578-6	
	dermal	Long term (chronic)	systemic	343	mg/kg/day
	inhalative	Long term (chronic)	systemic	950	mg/m³
2	1-methoxy-2-propanol			107-98-2 203-539-1	
	dermal	Long term (chronic)	systemic	50.6	mg/kg/day
	inhalative	Long term (chronic)	systemic	369	mg/m³
	inhalative	Short term (acute)	local	553.5	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	ethanol			64-17-5 200-578-6	
	oral	Long term (chronic)	systemic	87	mg/kg/day
	dermal	Long term (chronic)	systemic	206	mg/kg/day
	inhalative	Long term (chronic)	systemic	114	mg/m³
2	1-methoxy-2-propanol			107-98-2 203-539-1	
	oral	Long term (chronic)	systemic	3.3	mg/kg/day
	dermal	Long term (chronic)	systemic	18.1	mg/kg/day



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	inhalative	Long term (chronic)	systemic	43.9	mg/m³
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PNEC values

No	Substance name	ecological compartment	Type	CAS / EC no	Value
1	ethanol			64-17-5 200-578-6	
	water		fresh water	0.96	mg/L
	water		marine water	0.79	mg/L
	water		fresh water sediment	3.6	mg/kg dry weight
	water		marine water sediment	2.9	mg/L
	water		Aqua intermittent	2.75	mg/L
	soil		-	0.63	mg/kg dry weight
	sewage treatment plant		-	580	mg/L
	secondary poisoning		-	0.38	mg/kg food
2	1-methoxy-2-propanol			107-98-2 203-539-1	
	water		fresh water	10	mg/L
	water		marine water	1	mg/L
	water		Aqua intermittent	100	mg/L
	water		fresh water sediment	52.3	mg/kg
	with reference to: dry weight				
	water		marine water sediment	5.2	mg/kg
	with reference to: dry weight				
	soil		-	5.49	mg/kg
	with reference to: dry weight				
	sewage treatment plant		-	100	mg/L

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour
liquid
black

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Odour			
characteristic			
Odour threshold			
No data available			
pH value			
No data available			
Boiling point / boiling range			
Value		78	°C
Melting point / melting range			
No data available			
Decomposition point / decomposition range			
No data available			
Flash point			
Value		13	°C
Ignition temperature			
Value		287	°C
Auto-ignition temperature			
Comments		Product is not selfigniting.	
Oxidising properties			
No data available			
Explosive properties			
The product does not have explosive properties.			
Flammability (solid, gas)			
No data available			
Lower flammability or explosive limits			
Value		1.7	% vol
Upper flammability or explosive limits			
Value		15	% vol
Vapour pressure			
Value		59	hPa
Reference temperature		20	°C
Vapour density			
No data available			
Evaporation rate			
No data available			
Relative density			
No data available			
Density			
Value		0.86	g/cm³
Reference temperature		20	°C
Solubility in water			
Comments		Completely miscible	
Solubility(ies)			
No data available			
Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.



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1	ethanol	64-17-5	200-578-6
log Pow		-0.35	
Reference temperature		24	°C
with reference to	pH 7,4		
Method	OECD 107		
Source	ECHA		

Viscosity
No data available

Solvent content		
Value	81.9	%

Solids content		
Value	18	%

9.2 Other information

Other information
The physical data is that of the main component/s.

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
LD50		10470	mg/kg bodyweight
Species	rat		
with reference to	95% ethanol in water		
Method	OECD 401		
Source	ECHA		
2	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		4016	mg/kg bodyweight
Species	rat		
Method	EC 440/2008, B.1		
Source	ECHA		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		2000	mg/kg bodyweight
Species	> rat		



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Method Source	440/2008/EC B.3. ECHA
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Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
LC50		124.7	mg/l
Duration of exposure		4	h
State of aggregation		Vapour	
Species		rat	
Method		OECD 403	
Source		ECHA	

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Duration of exposure		24	h
Species		rabbit	
Method		OECD 404	
Source		ECHA	
Evaluation		non-irritant	
2	1-methoxy-2-propanol	107-98-2	203-539-1
Species		rabbit	
Method		EC 440/2008, B.4	
Source		ECHA	
Evaluation		non-irritant	

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		irritant	
2	1-methoxy-2-propanol	107-98-2	203-539-1
Species		rabbit	
Method		2004/73/EEC, B.5	
Source		ECHA	
Evaluation		non-irritant	

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Route of exposure		Skin	
Species		mouse	
Source		ECHA	
Evaluation		non-sensitizing	
2	1-methoxy-2-propanol	107-98-2	203-539-1
Route of exposure		Skin	
Species		guinea pig	
Method		440/2008/EC B.6	
Source		ECHA	
Evaluation		non-sensitizing	

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	Substance name	CAS no.	EC no.



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1	ethanol	64-17-5	200-578-6
Route of exposure		oral	
NOAEL			
Type of examination		2 generation study	
Species		mouse	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

STOT - single exposure			
No data available			

STOT - repeated exposure			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Route of exposure		oral	
Duration of exposure		14	week/s
Species		rat	
Target organ		kidneys	
Method		OECD 408	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Aspiration hazard			
No data available			

Delayed and immediate effects as well as chronic effects from short and long-term exposure			
Inhalation of solvent vapours in higher concentration may lead to nausea, headache, drowsiness and dizziness.			
Repeated and prolonged skin contact may cause removal of natural fat from the skin and irritation of the skin.			

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
LC50		14200	mg/l
Duration of exposure		96	h
Species		Pimephales promelas	
Method		EPA	
Source		ECHA	

Toxicity to fish (chronic)			
No data available			

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
EC50		>	10000
Duration of exposure		48	h
Species		Daphnia magna	
Method		DIN 38412 T.11	
Source		ECHA	

Toxicity to Daphnia (chronic)			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6



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NOEC	9.6	mg/l
Duration of exposure	9	day(s)
Species	Daphnia magna	
Source	ECHA	

Toxicity to algae (acute)			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
EC50		275	mg/l
Duration of exposure		72	h
Species	Chlorella vulgaris		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)			
No data available			

Bacteria toxicity			
No data available			

12.2 Persistence and degradability

Biodegradability			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Type	aerobic biodegradation		
Value	appr.	84	%
Duration		20	day(s)
Method	OECD		
Source	ECHA		
Evaluation	readily biodegradable		
2	1-methoxy-2-propanol	107-98-2	203-539-1
Type	aerobic biodegradation		
Value		96	%
Duration		28	day(s)
Method	OECD 301 E		
Source	ECHA		
Evaluation	readily biodegradable		

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
log Pow		-0.35	
Reference temperature		24	°C
with reference to	pH 7,4		
Method	OECD 107		
Source	ECHA		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information	
Do not discharge product unmonitored into the environment.	

SECTION 13: Disposal considerations



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13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1263
Proper shipping name	PAINT RELATED MATERIAL
Special Provision 640	640D
Tunnel restriction code	D/E
Label	3

14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1263
Proper shipping name	PAINT RELATED MATERIAL
EmS	F-E, S-E
Label	3

14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1263
Proper shipping name	Paint related material
Label	3

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject



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to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.	
Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES	
The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3, 40
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	P5b

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H226 Flammable liquid and vapour.

Department issuing safety data sheet

UMCO GmbH

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Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

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