

**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)**

**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

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	Classification (EC) 1272/2008 (CLP)	Additional information	%
	CAS / EC / Index / REACH no		Concentration	
1	<b>ethanol</b>			
	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	<b>1-methoxy-2-propanol</b>			
	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.

**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

**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 (CO<sub>2</sub>); 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.

**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

**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
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Ethanol			
	WEL long-term (8-hr TWA reference period)	1920 mg/m <sup>3</sup>	1000 ppm
2	1-methoxy-2-propanol	107-98-2	203-539-1
<b>2000/39/EC</b>			
1-Methoxypropanol-2			
	WEL short-term (15 min reference period)	568 mg/m <sup>3</sup>	150 ppm
	WEL long-term (8-hr TWA reference period)	375 mg/m <sup>3</sup>	100 ppm
	Skin resorption / sensibilisation	Skin	
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
1-Methoxypropan-2-ol			
	WEL short-term (15 min reference period)	560 mg/m <sup>3</sup>	150 ppm
	WEL long-term (8-hr TWA reference period)	375 mg/m <sup>3</sup>	100 ppm
	Comments	Sk	

**DNEL, DMEL and PNEC values**

**DNEL values (worker)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	ethanol			<b>64-17-5</b> <b>200-578-6</b>	
	dermal	Long term (chronic)	systemic	343	mg/kg/day
	inhalative	Long term (chronic)	systemic	950	mg/m <sup>3</sup>
2	1-methoxy-2-propanol			<b>107-98-2</b> <b>203-539-1</b>	
	dermal	Long term (chronic)	systemic	50.6	mg/kg/day
	inhalative	Long term (chronic)	systemic	369	mg/m <sup>3</sup>
	inhalative	Short term (acute)	local	553.5	mg/m <sup>3</sup>

**DNEL value (consumer)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	ethanol			<b>64-17-5</b> <b>200-578-6</b>	
	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/m <sup>3</sup>
2	1-methoxy-2-propanol			<b>107-98-2</b> <b>203-539-1</b>	
	oral	Long term (chronic)	systemic	3.3	mg/kg/day
	dermal	Long term (chronic)	systemic	18.1	mg/kg/day

**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

inhalative	Long term (chronic)	systemic	43.9	mg/m <sup>3</sup>
------------	---------------------	----------	------	-------------------

**PNEC values**

No	Substance name	CAS / EC no
ecological compartment		Type
		Value
1	ethanol	<b>64-17-5</b> <b>200-578-6</b>
	water	fresh water
	water	marine water
	water	fresh water sediment
	water	marine water sediment
	water	Aqua intermittent
	soil	-
	sewage treatment plant	-
	secondary poisoning	-
2	1-methoxy-2-propanol	<b>107-98-2</b> <b>203-539-1</b>
	water	fresh water
	water	marine water
	water	Aqua intermittent
	water	fresh water sediment
	with reference to: dry weight	
	water	marine water sediment
	with reference to: dry weight	
	soil	-
	with reference to: dry weight	
	sewage treatment plant	-

**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**

<b>Form/Colour</b>
liquid
black

**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

<b>Odour</b>		
characteristic		
<b>Odour threshold</b>		
No data available		
<b>pH value</b>		
No data available		
<b>Boiling point / boiling range</b>		
Value	78	°C
<b>Melting point / melting range</b>		
No data available		
<b>Decomposition point / decomposition range</b>		
No data available		
<b>Flash point</b>		
Value	13	°C
<b>Ignition temperature</b>		
Value	287	°C
<b>Auto-ignition temperature</b>		
Comments	Product is not selfigniting.	
<b>Oxidising properties</b>		
No data available		
<b>Explosive properties</b>		
The product does not have explosive properties.		
<b>Flammability (solid, gas)</b>		
No data available		
<b>Lower flammability or explosive limits</b>		
Value	1.7	% vol
<b>Upper flammability or explosive limits</b>		
Value	15	% vol
<b>Vapour pressure</b>		
Value	59	hPa
Reference temperature	20	°C
<b>Vapour density</b>		
No data available		
<b>Evaporation rate</b>		
No data available		
<b>Relative density</b>		
No data available		
<b>Density</b>		
Value	0.86	g/cm <sup>3</sup>
Reference temperature	20	°C
<b>Solubility in water</b>		
Comments	Completely miscible	
<b>Solubility(ies)</b>		
No data available		
<b>Partition coefficient: n-octanol/water</b>		
No	Substance name	CAS no.
		EC no.

**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

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		

**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

Method	440/2008/EC B.3.
Source	ECHA

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.



**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

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 mg/l
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

**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

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**

**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

### 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

**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

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

Georg-Wilhelm-Str. 187, D-21107 Hamburg

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.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO GmbH.

Prod-ID 17959

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

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

### 1.1 Product identifier

**Trade name**

**edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) 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**

Refilling 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)**

Flam. Liq. 3; H226

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**

Warning

**Hazardous component(s) to be indicated on label:**

1-methoxy-2-propanol

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

#### Hazard statements

H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.

#### Precautionary statements

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	<b>1-methoxy-2-propanol</b>			
	107-98-2 203-539-1 603-064-00-3 -	Flam. Liq. 3; H226 STOT SE 3; H336	< 75.00	%-b.w.
2	<b>ethanol</b>		<b>pls. refer to footnote (1)</b>	
	64-17-5 200-578-6 603-002-00-5 -	Flam. Liq. 2; H225 Eye Irrit. 2; H319	< 10.00	%-b.w.

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

(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
2	-	Eye Irrit. 2; H319: C $\geq$ 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. Do NOT use solvents or thinners.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.).

**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 (CO<sub>2</sub>); 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 of working area (local exhaust ventilation, if necessary). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Product inherent handling risks must be minimised taking the appropriate measures for protection and preventive actions. The working process should be designed to rule out the release of hazardous substances or skin contact as far as it is possible by the state of the art.

**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.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

**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.

**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 one.

**Advice on storage assembly**

Do not store together with: Acids; Alkalis; Oxidizing agents

**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	1-methoxy-2-propanol	107-98-2	203-539-1		
	2000/39/EWG				
	1-Methoxypropanol-2				
	STEL	568	mg/m <sup>3</sup>	150	ml/m <sup>3</sup>
	TWA	375	mg/m <sup>3</sup>	100	ml/m <sup>3</sup>
	Skin resorption / sensibilisation		Skin		
	<b>List of approved workplace exposure limits (WELs) / EH40</b>				
	1-Methoxypropan-2-ol				
	STEL	560	mg/m <sup>3</sup>	150	ml/m <sup>3</sup>
	TWA	375	mg/m <sup>3</sup>	100	ml/m <sup>3</sup>
	Skin resorption / sensibilisation		Sk		
2	ethanol	64-17-5	200-578-6		
	<b>List of approved workplace exposure limits (WELs) / EH40</b>				
	Ethanol				
	TWA	1920	mg/m <sup>3</sup>	1000	ml/m <sup>3</sup>

**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.

Appropriate Material	butyl rubber		
Material thickness		0.5	mm
Breakthrough time	>	240	min.



**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

**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

<b>Form/Colour</b>			
liquid			
red			
<b>Odour</b>			
characteristic			
<b>Odour threshold</b>			
No data available			
<b>pH value</b>			
Value	appr.	6.9	
<b>Boiling point / boiling range</b>			
Value	appr.	108	°C
Reference pressure		1013	hPa
<b>Melting point / melting range</b>			
No data available			
<b>Decomposition point / decomposition range</b>			
No data available			
<b>Flash point</b>			
Value	appr.	28	°C
<b>Auto-ignition temperature</b>			
No data available			
<b>Oxidising properties</b>			
No data available			
<b>Explosive properties</b>			
No data available			
<b>Flammability (solid, gas)</b>			
No data available			
<b>Lower flammability or explosive limits</b>			
No data available			
<b>Upper flammability or explosive limits</b>			
No data available			
<b>Vapour pressure</b>			
Value	<	110	kPa
Reference temperature		50	°C

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

<b>Vapour density</b>			
No data available			
<b>Evaporation rate</b>			
No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	appr.	0.944	g/cm <sup>3</sup>
Reference temperature		20	°C
<b>Solubility in water</b>			
No data available			
<b>Solubility(ies)</b>			
No data available			
<b>Partition coefficient: n-octanol/water</b>			
No data available			
<b>Viscosity</b>			
Value	appr.	13	sec
Reference temperature		20	°C
Type	Efflux time		
Method	DIN cup 4 mm		
<b>Solvent separation test</b>			
Value	<	3	%
Reference temperature		20	°C

## 9.2 Other information

<b>Other information</b>
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

Formation of hydrogen gas upon contact with materials to avoid. Explosion hazard.

### 10.4 Conditions to avoid

Heat, naked flames and other ignition sources. Protect from humid air and water.

### 10.5 Incompatible materials

Acids; Alkalis; Oxidizing agents

### 10.6 Hazardous decomposition products

Hydrogen

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		5660	mg/kg bodyweight
Species	rat		
Source	Manufacturer		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		9999.99	mg/kg bodyweight
Species	rabbit		
Source	Manufacturer		

Acute inhalational toxicity	
No data available	

Skin corrosion/irritation	
No data available	

Serious eye damage/irritation	
No data available	

Respiratory or skin sensitisation	
No data available	

Germ cell mutagenicity	
No data available	

Reproduction toxicity	
No data available	

Carcinogenicity	
No data available	

STOT-single exposure	
No data available	

STOT-repeated exposure	
No data available	

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.	

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>
No data available

<b>Toxicity to fish (chronic)</b>
No data available

<b>Toxicity to Daphnia (acute)</b>
No data available

<b>Toxicity to Daphnia (chronic)</b>
No data available

<b>Toxicity to algae (acute)</b>
No data available

<b>Toxicity to algae (chronic)</b>
No data available

<b>Bacteria toxicity</b>
No data available

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No data available.

### 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

<b>Other information</b>
Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 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.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

## SECTION 14: Transport information

### 14.1 Transport ADR/RID/ADN

Class	3
Classification code	F1
Packing group	III
Hazard identification no.	30
UN number	UN1263
Technical name	PAINT RELATED MATERIAL
Special Provision 640	640E
Tunnel restriction code	D/E
Label	3

### 14.2 Transport IMDG

Class	3
Packing group	III
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	III
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 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:	P5c
--	-----

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 400

**Current version :** 8.1.0, issued: 24.03.2016

**Replaced version:** 8.0.0, issued: 03.12.2015

**Region:** GB

## 15.2 Chemical safety assessment

No data available.

## 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)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

### Department issuing safety data sheet

UMCO Umwelt Consult GmbH

Georg-Wilhelm-Str. 183 , D-21107 Hamburg

Tel.: +49 40 / 79 02 36 300 Fax: +49 40 / 79 02 36 357 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.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO Umwelt Consult GmbH.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

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

### 1.1 Product identifier

**Trade name**

**edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue)  
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**

Refilling 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)**

Flam. Liq. 3; H226

STOT SE 3; H336

### 2.2 Label elements

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

**Hazard pictograms**



GHS02



GHS07

**Signal word**

Warning

**Hazardous component(s) to be indicated on label:**

1-methoxy-2-propanol

**Hazard statements**

H226

Flammable liquid and vapour.

H336

May cause drowsiness or dizziness.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

#### Precautionary statements

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 for extinction.
P405	Store locked up.
P501	Dispose of contents/container 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	<b>1-methoxy-2-propanol</b>			
	107-98-2 203-539-1 603-064-00-3 -	Flam. Liq. 3; H226 STOT SE 3; H336	80.00 - 85.00	%-b.w.
2	<b>hydrogen [tris[[[3-[(2-ethylhexyl)oxy]propyl]amino]sulphonyl]-29H,31H phthalocyaninesulphonato(3-)-N-(29)-,N-(30)-,N-(31)-,N-(32)]cuprate(1-), compound with 3-[(2-ethylhexyl)oxy]propylamine (1:1) C.I. Solvent Blue 70</b>			
	94277-77-7 304-661-9 -	Aquatic Chronic 3; H412	1.00 - 5.00	%-b.w.

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

#### 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. Do NOT use solvents or thinners.

##### 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.



**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

#### 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 (CO<sub>2</sub>); Carbon monoxide (CO)

#### 5.3 Advice for firefighters

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

### 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 of working area (local exhaust ventilation, if necessary).

##### 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.

#### 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 one.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

**Advice on storage assembly**

Do not store together with: Acids; Alkalis; Oxidizing agents

**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	1-methoxy-2-propanol	107-98-2	203-539-1
	<b>2000/39/EWG</b>		
	1-Methoxypropanol-2		
	STEL	568	mg/m <sup>3</sup> 150 ml/m <sup>3</sup>
	TWA	375	mg/m <sup>3</sup> 100 ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Skin	
	<b>List of approved workplace exposure limits (WELs) / EH40</b>		
	1-Methoxypropan-2-ol		
	STEL	560	mg/m <sup>3</sup> 150 ml/m <sup>3</sup>
	TWA	375	mg/m <sup>3</sup> 100 ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Sk	

### 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.

Appropriate Material butyl rubber

Material thickness 0.5 mm

Breakthrough time > 240 min.

**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

<b>Form/Colour</b>
liquid
blue
<b>Odour</b>
characteristic

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

<b>Odour threshold</b>			
No data available			
<b>pH value</b>			
No data available			
<b>Boiling point / boiling range</b>			
Value	>	100	°C
Reference pressure		1013	hPa
<b>Melting point / melting range</b>			
No data available			
<b>Decomposition point / decomposition range</b>			
No data available			
<b>Flash point</b>			
Value	23	- 60	°C
<b>Auto-ignition temperature</b>			
No data available			
<b>Oxidising properties</b>			
No data available			
<b>Explosive properties</b>			
No data available			
<b>Flammability (solid, gas)</b>			
No data available			
<b>Lower flammability or explosive limits</b>			
No data available			
<b>Upper flammability or explosive limits</b>			
No data available			
<b>Vapour pressure</b>			
Value	<	110	kPa
Reference temperature		50	°C
<b>Vapour density</b>			
No data available			
<b>Evaporation rate</b>			
No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	0.90	- 1.40	g/cm <sup>3</sup>
Reference temperature		20	°C
<b>Solubility in water</b>			
No data available			
<b>Solubility(ies)</b>			
No data available			
<b>Partition coefficient: n-octanol/water</b>			
No data available			
<b>Viscosity</b>			
Value	12	- 222	sec
Reference temperature		20	°C
Type	Efflux time		
Method	DIN cup 4 mm		

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

Solvent separation test			
Value	<	3	%
Reference temperature		20	°C

**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**

No data available.

**10.3 Possibility of hazardous reactions**

No data available.

**10.4 Conditions to avoid**

Heat; Moisture.

**10.5 Incompatible materials**

Acids; Alkalis; Oxidizing agents

**10.6 Hazardous decomposition products**

Hydrogen

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		5660	mg/kg bodyweight
Species	rat		
Source	Manufacturer		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		9999.99	mg/kg bodyweight
Species	rabbit		
Source	Manufacturer		

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

<b>Acute inhalational toxicity</b>
No data available
<b>Skin corrosion/irritation</b>
No data available
<b>Serious eye damage/irritation</b>
No data available
<b>Respiratory or skin sensitisation</b>
No data available
<b>Germ cell mutagenicity</b>
No data available
<b>Reproduction toxicity</b>
No data available
<b>Carcinogenicity</b>
No data available
<b>STOT-single exposure</b>
No data available
<b>STOT-repeated exposure</b>
No data available
<b>Aspiration hazard</b>
No data available
<b>Delayed and immediate effects as well as chronic effects from short and long-term exposure</b>
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.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>
No data available

<b>Toxicity to fish (chronic)</b>
No data available

<b>Toxicity to Daphnia (acute)</b>
No data available

<b>Toxicity to Daphnia (chronic)</b>
No data available

<b>Toxicity to algae (acute)</b>
No data available

<b>Toxicity to algae (chronic)</b>
No data available

<b>Bacteria toxicity</b>
No data available

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No data available.

### 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

<b>Other information</b>
Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 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.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

## SECTION 14: Transport information

### 14.1 Transport ADR/RID/ADN

Class	3
Classification code	F1
Packing group	III
Hazard identification no.	30
UN number	UN1263
Technical name	PAINT RELATED MATERIAL
Special Provision 640	640E
Tunnel restriction code	D/E
Label	3

### 14.2 Transport IMDG

Class	3
Packing group	III
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	III
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 73/78 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 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:	P5c
--	-----

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (blue) contained in: edding 400

**Current version :** 6.0.0, issued: 20.07.2015

**Replaced version:** 5.0.0, issued: 14.10.2014

**Region:** GB

## 15.2 Chemical safety assessment

No data available.

## 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)

H412 Harmful to aquatic life with long lasting effects.

### Department issuing safety data sheet

UMCO Umwelt Consult GmbH

Georg-Wilhelm-Str. 183 , D-21107 Hamburg

Tel.: +49 40 / 79 02 36 300 Fax: +49 40 / 79 02 36 357 e-mail: umco@umco.de

This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

### Alterations/supplements:

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

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO Umwelt Consult GmbH.



**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

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

### 1.1 Product identifier

**Trade name**

**edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green)  
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**

Refilling 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)**

Flam. Liq. 3; H226

Skin Sens. 1; H317

STOT SE 3; H336

### 2.2 Label elements

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

**Hazard pictograms**



GHS02



GHS07

**Signal word**

Warning

**Hazardous component(s) to be indicated on label:**

1-methoxy-2-propanol

Amines, C12-14-branched alkyl, 4-[(5-cyano-1-ethyl-5,6-dihydro-2 hydroxy-4-methyl-6-oxo-3-pyridinyl)azo]-1,3-benzenedisulfonate C.I. Solvent Yellow 146

**Hazard statements**

H226

Flammable liquid and vapour.

H317

May cause an allergic skin reaction.

H336

May cause drowsiness or dizziness.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

#### Precautionary statements

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 for extinction.
P405	Store locked up.
P501	Dispose of contents/container 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	<b>1-methoxy-2-propanol</b>		
	107-98-2 203-539-1 603-064-00-3 -	Flam. Liq. 3; H226 STOT SE 3; H336	75.00 - 80.00 %b.w.
2	<b>hydrogen [tris[[[3-[(2-ethylhexyl)oxy]propyl]amino]sulphonyl]-29H,31H phthalocyaninesulphonato(3-)-N-(29)-,N-(30)-,N-(31)-,N-(32)]cuprate(1-), compound with 3-[(2-ethylhexyl)oxy]propylamine (1:1) C.I. Solvent Blue 70</b>		
	94277-77-7 304-661-9 -	Aquatic Chronic 3; H412	5.00 - 10.00 %b.w.
3	<b>Amines, C12-14-branched alkyl, 4-[(5-cyano-1-ethyl-5,6-dihydro-2-hydroxy-4-methyl-6-oxo-3-pyridinyl)azo]-1,3-benzenedisulfonate C.I. Solvent Yellow 146</b>		
	94279-65-9 304-811-3 -	Aquatic Chronic 2; H411 Eye Irrit. 2; H319 Skin Sens. 1; H317	1.00 - 5.00 %b.w.

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

#### 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. Do NOT use solvents or thinners.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

**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 (CO<sub>2</sub>); Carbon monoxide (CO)

**5.3 Advice for firefighters**

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

## 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 of working area (local exhaust ventilation, if necessary).

**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.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

**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 one.

**Advice on storage assembly**

Do not store together with: Acids; Alkalis; Oxidizing agents

**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	1-methoxy-2-propanol	107-98-2	203-539-1		
	<b>2000/39/EWG</b>				
	1-Methoxypropanol-2				
	STEL	568	mg/m <sup>3</sup>	150	ml/m <sup>3</sup>
	TWA	375	mg/m <sup>3</sup>	100	ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Skin			
	<b>List of approved workplace exposure limits (WELs) / EH40</b>				
	1-Methoxypropan-2-ol				
	STEL	560	mg/m <sup>3</sup>	150	ml/m <sup>3</sup>
	TWA	375	mg/m <sup>3</sup>	100	ml/m <sup>3</sup>
	Skin resorption / sensibilisation	Sk			

**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.

Appropriate Material	butyl rubber		
Material thickness		0.5	mm
Breakthrough time	>	240	min.

**Other**

Normal chemical work clothing.

**Environmental exposure controls**

No data available.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form/Colour</b>			
liquid			
green			
<b>Odour</b>			
characteristic			
<b>Odour threshold</b>			
No data available			
<b>pH value</b>			
No data available			
<b>Boiling point / boiling range</b>			
Value	>	100	°C
Reference pressure		1013	hPa
<b>Melting point / melting range</b>			
No data available			
<b>Decomposition point / decomposition range</b>			
No data available			
<b>Flash point</b>			
Value	23	- 60	°C
Method	Abel-Pensky		
<b>Auto-ignition temperature</b>			
No data available			
<b>Oxidising properties</b>			
No data available			
<b>Explosive properties</b>			
No data available			
<b>Flammability (solid, gas)</b>			
No data available			
<b>Lower flammability or explosive limits</b>			
No data available			
<b>Upper flammability or explosive limits</b>			
No data available			
<b>Vapour pressure</b>			
Value	<	110	kPa
Reference temperature		50	°C
<b>Vapour density</b>			
No data available			
<b>Evaporation rate</b>			
No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	0.90	- 1.40	g/cm <sup>3</sup>
Reference temperature		20	°C

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

<b>Solubility in water</b>			
No data available			
<b>Solubility(ies)</b>			
No data available			
<b>Partition coefficient: n-octanol/water</b>			
No data available			
<b>Viscosity</b>			
Value	12	-	222 sec
Reference temperature			20 °C
Type	Efflux time		
Method	DIN cup 4 mm		
<b>Solvent separation test</b>			
Value	<	3	%
Reference temperature		20	°C

## 9.2 Other information

<b>Other information</b>
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; Moisture.

### 10.5 Incompatible materials

Acids; Alkalis; Oxidizing agents

### 10.6 Hazardous decomposition products

Hydrogen

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

<b>Acute oral toxicity</b>			
No	Substance name	CAS no.	EC no.
1	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		5660	mg/kg bodyweight
Species	rat		
Source	Manufacturer		
<b>Acute dermal toxicity</b>			
No	Substance name	CAS no.	EC no.
1	1-methoxy-2-propanol	107-98-2	203-539-1
LD50		9999.99	mg/kg bodyweight
Species	rabbit		
Source	Manufacturer		

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

<b>Acute inhalational toxicity</b>
No data available
<b>Skin corrosion/irritation</b>
No data available
<b>Serious eye damage/irritation</b>
No data available
<b>Respiratory or skin sensitisation</b>
No data available
<b>Germ cell mutagenicity</b>
No data available
<b>Reproduction toxicity</b>
No data available
<b>Carcinogenicity</b>
No data available
<b>STOT-single exposure</b>
No data available
<b>STOT-repeated exposure</b>
No data available
<b>Aspiration hazard</b>
No data available
<b>Delayed and immediate effects as well as chronic effects from short and long-term exposure</b>
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.

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

**SECTION 12: Ecological information**

**12.1 Toxicity**

<b>Toxicity to fish (acute)</b>
No data available
<b>Toxicity to fish (chronic)</b>
No data available
<b>Toxicity to Daphnia (acute)</b>
No data available
<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
No data available

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

**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**

<b>Other information</b>
Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations**

**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.



**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

**SECTION 14: Transport information**

**14.1 Transport ADR/RID/ADN**

Class	3
Classification code	F1
Packing group	III
Hazard identification no.	30
UN number	UN1263
Technical name	PAINT RELATED MATERIAL
Special Provision 640	640E
Tunnel restriction code	D/E
Label	3

**14.2 Transport IMDG**

Class	3
Packing group	III
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	III
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 73/78 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 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:	P5c
--	-----

**Trade name:** edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (green) contained in: edding 400

**Current version :** 5.0.0, issued: 20.07.2015

**Replaced version:** 4.0.0, issued: 14.10.2014

**Region:** GB

## 15.2 Chemical safety assessment

For this mixture a chemical safety assessment has not been carried out.

## 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)

H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

### Department issuing safety data sheet

UMCO Umwelt Consult GmbH

Georg-Wilhelm-Str. 183 , D-21107 Hamburg

Tel.: +49 40 / 79 02 36 300 Fax: +49 40 / 79 02 36 357 e-mail: [umco@umco.de](mailto:umco@umco.de)

This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Alterations/supplements:

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

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO Umwelt Consult GmbH.