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

1.1 Product identifier

Trade name

edding refill ink permanent marker RMTK25 (black) contained in: edding retract 11

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)

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



GH:

Signal word

Danger

Hazardous component(s) to be indicated on label:

1-methoxy-2-propanol



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Hazard statements

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
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 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 /	Classification (EC) 1272/2008 (CLP)	Concentration	%
	REACH no			
1	1-methoxy-2-propa	nol		
	107-98-2	Flam. Liq. 3; H226	< 75.00	%-b.w.
	203-539-1	STOT SE 3; H336		
	603-064-00-3			
	01-2119457435-35			
2	propan-2-ol			
	67-63-0	Eye Irrit. 2; H319	< 20.00	%-b.w.
	200-661-7	Flam. Liq. 2; H225		
	603-117-00-0	STOT SE 3; H336		
	01-2119457558-25			

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 immediately with plenty of water for several minutes.

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.



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After ingestion

Do not induce vomiting. Call a doctor immediately. Never give anything by mouth to an unconscious person. Rinse out mouth and give plenty of water to drink.

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. Wear protective clothing. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

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 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.

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 one.

Advice on storage assembly

Do not store together with: Oxidizing agents; Acid anhydrides

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/m³	150	ml/m³
	TWA	375	mg/m³	100	ml/m³
	Skin resorption / sensibilisation	Skin			
	List of approved workplace exposure limits (WELs) / E	EH40			
	1-Methoxypropan-2-ol				
	STEL	560	mg/m³	150	ml/m³
	TWA	375	mg/m³	100	ml/m³
	Skin resorption / sensibilisation	Sk			
2	propan-2-ol	67-63-0		200-661-7	
	List of approved workplace exposure limits (WELs) / E	EH40			
	Propan-2-ol				
	STEL	1250	mg/m³	500	ml/m³
	TWA	999	mg/m³	400	ml/m³

DNEL and PNEC values

DNEL values (worker)

No	Substance name	Substance name			
	Route of exposure	Exposure time	Effect	Value	
1	7 P P P			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 (acut)	local	553.5	mg/m³
2	propan-2-ol			67-63-0	
				200-661-7	
	dermal	Long term (chronic)	systemic	888	mg/kg/day
	inhalative	Long term (chronic)	systemic	500	mg/m³



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DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	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
	inhalative	Long term (chronic)	systemic	43.9	mg/m³
2	propan-2-ol			67-63-0	
				200-661-7	
	oral	Long term (chronic)	systemic	26	mg/kg/day
	dermal	Long term (chronic)	systemic	319	mg/kg/day
	inhalative	Long term (chronic)	systemic	89	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Туре	Value	
1	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
2	propan-2-ol		67-63-0	
			200-661-7	
	water	fresh water	140.9	mg/l
	water	marine water	140.9	mg/l
	water	fresh water sediment	552	mg/l
	water	marine water sediment	552	mg/l
	water	Aqua intermittent	140.9	
	soil	-	28	mg/kg
	sewage treatment plant	-	2251	mg/l
_	secondary poisoning	-	160	mg/kg
	with reference to: food			

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. Short term: filter apparatus, Filter A

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 workstation 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



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Material thickness 0.5 mm Breakthrough time >= 480 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

Form/Colour				
liquid				
black				
Odour				
alkohol-like				
Odour threshold				
No data available				
pH value				
Value	۷	1 -	9.5	
Boiling point / boiling range				
Value			82	°C
Melting point / melting range				
Value			-89.5	°C
Decomposition point / decomposition range				
No data available				
Flash point				
Value			12	°C
Auto-ignition temperature				
Value			425	°C
Oxidising properties				
No data available				
Explosive properties				
No data available				
Flammability (solid, gas)				
No data available				
Lower flammability or explosive limits				
Value			2	% vol
Upper flammability or explosive limits				
Value			12	% vol
Vapour pressure				
Value			48	hPa
Reference temperature			20	°C



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Vapour density		
No data available		
Evaporation rate		
No data available		
Relative density		
No data available		

Density
No data available

 Solubility in water

 Remarks
 miscible

Solubility(ies)

No data available

Part	Partition coefficient: n-octanol/water							
No	Substance name	CAS no.		EC no.				
1	propan-2-ol	67-63-0		200-661-7				
log F	Pow		0.05					
Reference temperature			25	°C				
Sou	rce	ECHA						

Viscosity					
Value	2 - 6 cP				
Reference temperature	20 °C				
Туре	dynamic				

9.2 Other information

Other information	
No data available.	

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. Moisture.

10.5 Incompatible materials

Oxidizing agents; Acid anhydrides; oxygen

10.6 Hazardous decomposition products

None, if handled according to intended use.



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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acu	Acute oral toxicity						
No	Substance name		CAS no.		EC no.		
1	1-methoxy-2-propanol		107-98-2		203-539-1		
LD5	50			4016	mg/kg bodyweight		
Spe	cies	rat					
Sou	rce	ECHA					
2	propan-2-ol		67-63-0		200-661-7		
LD5	50			5840	mg/kg bodyweight		
Spe	cies	rat					
		OECD 401					
Sou	rce	ECHA					

Acu	Acute dermal toxicity						
No	Substance name	CAS	no.	EC no.			
1	1-methoxy-2-propanol	107-	98-2	203-539-1			
LD5	0	>	2000	mg/kg bodyweight			
Spec	cies	rat					
Soul	rce	ECHA					

Acu	Acute inhalational toxicity						
No	Substance name		CAS no.		EC no.		
1	propan-2-ol		67-63-0		200-661-7		
LC5	0	>		10000	ppmV		
Dura	Duration of exposure			6	h		
State of aggregation		Gas					
Species		rat					
Method		OECD 403					
Soul	rce	ECHA					

Skir	Skin corrosion/irritation							
No	Substance name		CAS no.	EC no.				
1	1-methoxy-2-propanol		107-98-2	203-539-1				
Species		rabbit						
Source		ECHA						
Eval	luation	non-irritant						
2	propan-2-ol		67-63-0	200-661-7				
Species		rabbit						
Source		ECHA						
Eval	luation	non-irritant						

Seri	Serious eye damage/irritation						
No	Substance name		CAS no.	EC no.			
1	1-methoxy-2-propanol		107-98-2	203-539-1			
Spe	cies	rabbit					
Source		ECHA					
Eval	Evaluation						
2	propan-2-ol		67-63-0	200-661-7			
Spe	cies	rabbit					
Method		OECD 405					
Source		ECHA					
Eval	uation	irritant					



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Res	Respiratory or skin sensitisation					
No	Substance name	CAS no.	EC no.			
1	1-methoxy-2-propanol	107-98-2	203-539-1			
Rout	te of exposure	Skin				
Species		guinea pig				
Sour	rce	ECHA				
Eval	uation	non-sensitizing				
2	propan-2-ol	67-63-0	200-661-7			
Rout	te of exposure	Skin				
Spec	cies	guinea pig				
Method		OECD 406				
Source		ECHA				
Eval	uation	non-sensitizing				

Geri	Germ cell mutagenicity							
No	Substance name	CAS no.	EC no.					
1	propan-2-ol	67-63-0	200-661-7					
Source		ECHA						
Evaluation/classification		Based on available data, the classification	n criteria are not met.					

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. Eye contact with the product may lead to irritation.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)							
No	Substance name	CAS no.		EC no.			
1	propan-2-ol	67-63-0		200-661-7			
LC50			9640	mg/l			
Duration of exposure			96	h			
Species		Pimephales promelas					
Method		OECD 203					
Sou	rce	ECHA					



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Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

Biod	Biodegradability							
No	Substance name	CAS no.		EC no.				
1	propan-2-ol	67-63-0		200-661-7				
Туре		BOD/COD						
Valu			53	%				
Duration			5	day(s)				
Source		ECHA						
Evaluation		readily biodegradable						

12.3 Bioaccumulative potential

Part	Partition coefficient: n-octanol/water							
No	Substance name	CAS no.		EC no.				
1	propan-2-ol	67-63-0		200-661-7				
log Pow			0.05					
Reference temperature			25	°C				
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

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.



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SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

Class 3 Classification code F1 Packing group Ш Hazard identification no. 33 **UN** number UN1263 Technical name **PAINT** Special Provision 640 640D Tunnel restriction code D/E Label

14.2 Transport IMDG

 Class
 3

 Packing group
 II

 UN number
 UN1263

 Proper shipping name
 PAINT

 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
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 <u>EU regulations</u>

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 No 3, 40 XVII.

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



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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)

H226 Flammable liquid and vapour.

Department issuing safety data sheet

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

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