1.) Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Trade name

edding Permanent Marker Refill Ink T25, T100, T1000, MTK25 (red) contained in: edding 3000

Use of the substance/preparation

Refilling ink

Company/undertaking identification

Address

edding Aktiengesellschaft
Bookkoppel 7
D-22926 Ahrensburg

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

Information provided by / telephone

+49 (0)4102 - 808-0

Emergency telephone

+49 (0)30 192 40 (Toxic Substance Emergency Call Centre Berlin)

Advice on Safety Data Sheet

sdb_info@umco.de

2.) Hazards identification

Classification

R10	Flammable.
N; R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard symbols

N	Dangerous for the environment

R phrases

10	Flammable.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3.) Composition / information on ingredients

Chemical characterization

Mixture (preparation)

Hazardous ingredients

1-METHOXY-2-PROPANOL

EC no.	203-539-1	Index no.	603-064-00-3	CAS no.	107-98-2
Concentration	> 75	< 80	%-b.w.		
Classification	R10				
Hazard symbols	-	R phrases	10		

9-[2-(ethoxycarbonyl)phenyl]-3,6-bis(ethylamino)-2,7 dimethylxanthylium ethyl sulphate

EC no.	247-906-4	Index no.	-	CAS no.	26694-69-9
Concentration	> 2,5	< 5	%-b.w.		
Classification	Xn; R22 Xi; R41 N; R50/53				
Hazard symbols	Xn, N	R phrases	22-41-50/53		

Other information (chapter 3.)
The data subject of this Material Safety Data sheet refer to the ink contained in this product (marker).

4.) 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
Separate eyelids, wash the eyes thoroughly with water (15 min.).

After ingestion
Rinse mouth thoroughly with water. Summon a doctor immediately. Never give anything by mouth to an unconscious person.

5.) Fire-fighting measures

Suitable extinguishing media
Alcohol-resistant foam; extinguishing powder; Carbon dioxide; Water spray jet

Extinguishing media that must not be used for safety reasons
Full water jet

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
In the event of fire, the following can be released:
Carbon dioxide (CO2)
Carbon monoxide (CO)

Special protective equipment for fire-fighters
Use self-contained breathing apparatus. Wear protective clothing.

Other information
Cool endangered containers with water spray jet. Suppres gases/vapours/mists with water spray jet.

6.) Accidental release measures

Personal precautions
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.

Environmental precautions
Do not discharge into the drains/surface waters/groundwater.

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

7.) Handling and storage

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.

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.

Storage

Requirements for storage rooms and vessels
Containers which are opened must be carefully resealed 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
Alcalies
Oxidizing agents

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

8.) Exposure controls / personal protection

Exposure limit values
1-METHOXY-2-PROPANOL

CAS no.	107-98-2			
EC no.	203-539-1			

2000/39/EWG

1-Methoxypropanol-2				
TWA	375	mg/m³	100	ml/m³
STEL	568	mg/m³	150	ml/m³
Skin resorption / sensibilisation	Skin			

Occupational Exposure Standards (OESs) / EH40

1-Methoxypropan-2-ol				
TWA	375	mg/m³	100	ml/m³
STEL	560	mg/m³	150	ml/m³
Skin resorption / sensibilisation	Sk			

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.

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 glove 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.

Eye protection
Safety glasses with side protection shield (EN 166)

Skin protection
Clothing as usual in the chemical industry.

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.

9.) Physical and chemical properties

General information

Form	liquid
Colour	red
Odour	characteristic

Important health, safety and environmental information

Changes in physical state

Type	Boiling point			
Value	>		100	℃
Pressure		1013	hPa	

Flash point

Value		23	- 55	℃
Method	Abel-Pensky			

Vapour pressure

Value	<		110	kPa
Reference temperature		50	℃	

Density

Value		0,90	- 1,40	g/cm³
Reference temperature		20	℃	

Viscosity

Type	Efflux time			
Value		12	- 222	sec
Method	DIN cup 4 mm			
Reference temperature		20	℃	

Solvent separation test

Value	<		3	%
Reference temperature		20	℃	

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

10.) Stability and reactivity

Materials to avoid
Acids; Alcalis; Oxidizing agents

Hazardous decomposition products
No hazardous decomposition products known.

11.) Toxicological information

Experience in practice
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.

Other information (chapter 11.)
Product specific toxicological data are not known.

12.) Ecological information

Other adverse effects
Ecological data are not available.
Do not discharge product unmonitored into the environment.

13.) Disposal considerations

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.

14.) Transport information

Land transport ADR/RID

Class	3	Classification code	F1
Packaging group	III		
Hazard id. no.	30		
Label	3		
UN number	1263		
Technical name	Paint related material		
Special Provision 640	E		

Marine transport IMDG

Class	3
Packaging group	III
UN number	1263
Proper shipping name	Paint related material
EmS	F-E, S-E
MARPOL	--
Label	3

Air transport ICAO/IATA

Class	3
Packaging group	III
UN number	1263
Proper shipping name	Paint related material
Label	3

15.) Regulatory information

Labelling in accordance with EC directives
The product is classified and labelled in accordance with EC Directive 1999/45/EC.
The data subject of this Material Safety Data sheet refer to the ink contained in this product (marker).

Hazard symbols

N	Dangerous for the environment

R phrases

10	Flammable.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrases

51	Use only in well-ventilated areas.
61	Avoid release to the environment. Refer to special instructions / Safety data sheets.

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks	Annex I, part 2, category 6

16.) Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.
Regulation (EC) No 1907/2006 (REACH) as amended in each case.
EC Directives 2000/39/EC, 2006/15/EC as amended in each case.
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.

Relevant R-phrases (chapter 3):

10	Flammable.
22	Harmful if swallowed.
41	Risk of serious damage to eyes.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Department issuing safety data sheet

UMCO Umwelt Consult GmbH
Georg-Wilhelm-Str. 183 b, D-21107 Hamburg
Tel.: +49 40 / 41 92 13 00 Fax: +49 40 / 41 92 13 57 e-mail: umco@umco.de

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