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

#### 1.1 Product identifier

Trade name

## Ink Permanent 2201 (red) contained in: edding 21, edding 22

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

Relevant identified uses of the substance or mixture

Refilling ink

#### 1.3 Details of the supplier of the safety data sheet

#### **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

#### **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 Directive 67/548/EEC or 1999/45/EC

F; R11 R67

#### 2.2 Label elements

#### Labelling according to Directive 1999/45/EC

## **Hazard symbols**



Highly flammable

#### R phrases

11 Highly flammable.

67 Vapours may cause drowsiness and dizziness.

## S phrases

2 Keep out of the reach of children.
7 Keep container tightly closed.
29 Do not empty into drains.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

## 2.3 Other hazards

No data available.



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## **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		Addit	ional in	for	matio	n	
	CAS / EC / Index / REACH no	Classification 67/548/EEC		entratio			<u></u>	%-b.w.
1	ethanol							
	64-17-5 200-578-6 603-002-00-5	F; R11	>	50,00	-	<	70,00	%-b.w.
2	1-METHOXY-2-PRO	PANOL						
	107-98-2 203-539-1 603-064-00-3	R10 R67	>	25,00	-	<	30,00	%-b.w.

Full Text for all R-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

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.

#### 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

Full 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)



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### 5.3 Advice for firefighters

Use self-contained breathing apparatus. Cool endangered containers with water spray jet. Wear protective clothing. Suppres 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.

#### 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.

#### 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 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

## 7.3 Specific end use(s)

No data available.



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## **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

## Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	ethanol	64-17-5		200-578-6	
	List of approved workplace exposure limits (WELs) / B	EH40			
	Ethanol				
	TWA	1920	mg/m³	1000	ml/m³
2	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) / I	EH40			
	1-Methoxypropan-2-ol				
	STEL	560	mg/m³	150	ml/m³
	TWA	375	mg/m³	100	ml/m³
	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 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

#### 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	
red	

Odour	
characteristic	

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Odern threehold					
Odour threshold  No data available					
pH value					
No data available					
Boiling point / boiling range					
Value	>			70	°C
Reference pressure				1013	hPa
Melting point / melting range					
No data available					
Decomposition point / decomposition range					
No data available					
Flash point		- 10			
Value		18	-	21	°C
Auto-ignition temperature					
No data available					
Oxidising properties  No data available					
Explosive properties  No data available					
Flammability (solid, gas) No data available					
Lower flammability or explosive limits					
No data available					
Upper flammability or explosive limits					
No data available					
Vapour pressure				440	
Value Reference temperature	<			110 50	kPa °C
Vapour density  No data available					
Evaporation rate					
No data available					
Relative density					
No data available					
Density					
Value		0,80	-	1,20	g/cm³
Reference temperature				20	°C
Solubility in water					
No data available					
Solubility(ies)					
No data available					
Partition coefficient: n-octanol/water No data available					
Viscosity					
Value		12	-	80	sec
Reference temperature Type	Efflux	time		20	°C
Method		up 4 mm	1		

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Solvent separation test			
Value	<	3	%

#### 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

No data available.

## 10.5 Incompatible materials

Acids; Alcalis; Oxidizing agents

#### 10.6 Hazardous decomposition products

No hazardous decomposition products known.

## **SECTION** 11: Toxicological information

## 11.1 Information on toxicological effects

Acute oral toxicity					
LD50	5660 mg/kg				
Species	rat				
Reference substance	CAS 107-98-2				

Acute dermal toxicity					
LD50	9999,9 mg/kg				
Species	rabbit				
Reference substance	CAS 107-98-2				

Acute inhalational toxicity	
Remarks	No data available.



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#### 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.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

## Fish toxicity

No data available

#### Daphnia toxicity

No data available

## Algae toxicity

No data available

#### **Bacteria toxicity**

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

## Other information

Ecological data are not available.

Do not discharge product unmonitored into the environment.



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## **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.

## **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

Technical 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.

## 14.6 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

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

Remarks

Annex I, part 2, category 7 b

#### 15.2 Chemical safety assessment

No data available.

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## **SECTION 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), 1272/2008 (CLP) as amended in each case.

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

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 R-, H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

R10 Flammable. R11 Highly flammable.

R67 Vapours may cause drowsiness and dizziness.

### Department issuing safety data sheet

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