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

#### 1.1 Product identifier

**Trade name** 

# edding Porcelain marker ink (black) contained in: edding 4200

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

#### Relevant identified uses of the substance or mixture

Ink for use in felt pens

#### 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)

Skin Sens. 1; H317

#### 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



# Signal word

Warning

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

1,3,5-tris(2-hydroxyethyl)-1,3,5-triazinane

1,2-benzisothiazol-3(2H)-one

### Hazard statement(s)

H317

May cause an allergic skin reaction.



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#### Precautionary statement(s)

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
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)



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**Hazardous ingredients** 

No	Substance name Additional information				
NO	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)		ntration	%
	REACH no	Classification (EC) 12/2/2006 (CLP)	Concei	illation	70
1	ethanediol				
•	107-21-1	Acute Tox. 4*; H302	<	5.00	%-b.w.
	203-473-3	Addie 10x. 4 , 11002		3.00	70-D.W.
	603-027-00-1				
	-				
2	1.3.5-tris(2-hvdroxy	/ethyl)-1,3,5-triazinane			
_	4719-04-4	Acute Tox. 4*; H302	<	2.50	%-b.w.
	225-208-0	Skin Sens. 1; H317			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	613-114-00-6	.,			
	-				
3	ammonia, anhydro	us			
	7664-41-7	Acute Tox. 3*; H331	<	2.50	%-b.w.
	231-635-3	Aquatic Acute 1; H400			
	007-001-00-5	Flam. Gas 2; H221			
	-	Press. Gas			
		Skin Corr. 1B; H314			
4	1,2-benzisothiazol-				
	2634-33-5	Acute Tox. 4*; H302	<	0.50	%-b.w.
	220-120-9	Aquatic Acute 1; H400			
	613-088-00-6	Eye Dam. 1; H318			
	-	Skin Irrit. 2; H315			
		Skin Sens. 1; H317			
5	ammonia, anhydro				
	7664-41-7	Acute Tox. 3; H331	<	0.50	%-b.w.
	231-635-3	Aquatic Acute 1; H400			
	007-001-00-5	Skin Corr. 1B; H314			
	01-2119488876-14	Press. Gas; H280			
		Flam. Gas 2; H221			
6	CARBON BLACK			<b>=</b> 00	0/ 1
	1333-86-4	-	>=	5.00 - < 10.00	%-b.w.
	215-609-9				
	-				
7	glycerol				
1	56-81-5	I_	<	5.00	%-b.w.
	200-289-5	_		3.00	/0-D.W.
	200-209-0				
	_				
	_				

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

(\*,\*\*,\*\*\*\*) Detailed explanation pls. refer to CLP regulation No. 1272/2008, annex VI, 1.2

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
2	-	Skin Sens. 1; H317: C >= 0.1%	-	-
3	U	-	-	-
4	-	Skin Sens. 1; H317: C >= 0.05%	-	-
5	U	Skin Irrit. 2; H315: C >= 1% Skin Corr. 1B; H314: C >= 5% Aquatic Acute 1; H400: C >= 25%	M = 1	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

#### 3.3 Other information

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



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### **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.

#### 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 indestion

Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

#### 4.2 Most important symptoms and effects, both acute and delayed

No data available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

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

# Unsuitable extinguishing media

High power water jet

#### 5.2 Special hazards arising from the substance or mixture

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

#### 5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Cool endangered containers 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.

#### 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.



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# **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). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn.

#### 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.

#### 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.

#### 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	CARBON BLACK	1333-86-4		215-609-9			
	List of approved workplace exposure limits (WELs) / EH40						
	Carbon black						
	WEL short-term (15 min reference period)	7	mg/m³				
	WEL long-term (8-hr TWA reference period)	3.5	mg/m³				
2	glycerol	56-81-5	Ŭ	200-289-5			
	List of approved workplace exposure limits (WE	Ls) / EH40					
	Glycerol mist	•					
	WEL long-term (8-hr TWA reference period)	10	mg/m³				
3	ethanediol	107-21-1	•	203-473-3			
	2000/39/EC						
	Ethylene glycol						
	WEL short-term (15 min reference period)	104	mg/m³	40	ppm		
	WEL long-term (8-hr TWA reference period)	52	mg/m³	20	ppm		
	Skin resorption / sensibilisation	Skin					
	List of approved workplace exposure limits (WE	Ls) / EH40					
	Ethane-1,2-diol vapour						
	WEL short-term (15 min reference period)	104	mg/m³	40	ppm		
	WEL long-term (8-hr TWA reference period)	52	mg/m³	20	ppm		
	Comments	Sk					
	List of approved workplace exposure limits (WE	Ls) / EH40					
	Ethane-1,2-diol particulate						
	WEL long-term (8-hr TWA reference period)	10	mg/m³				
	Comments	Sk					
4	ammonia, anhydrous	7664-41-7		231-635-3			
	2000/39/EC						
	Ammonia, anhydrous						
	WEL short-term (15 min reference period)	36	mg/m³	50	ppm		
	WEL long-term (8-hr TWA reference period)	14	mg/m³	20	ppm		
	List of approved workplace exposure limits (WE	Ls) / EH40					
	Ammonia, anhydrous						
	WEL short-term (15 min reference period)	25	mg/m³	35	ppm		
	WEL long-term (8-hr TWA reference period)	18	mg/m³	25	ppm		
5	ammonia, anhydrous	7664-41-7		231-635-3			
	2000/39/EC						
	Ammonia, anhydrous						
	WEL short-term (15 min reference period)	36	mg/m³	50	ppm		
	WEL long-term (8-hr TWA reference period)	14	mg/m³	20	ppm		
	List of approved workplace exposure limits (WELs) / EH40						
	Ammonia, anhydrous						
	WEL short-term (15 min reference period)	25	mg/m³	35	ppm		
	WEL long-term (8-hr TWA reference period)	18	mg/m³	25	ppm		



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# **DNEL, DMEL and PNEC values**

## **DNEL** values (worker)

	DIALE Values (Worker)					
No	Substance name			CAS / EC no		
	Route of exposure	Exposure time	Effect	Value		
1	ammonia, anhydrous			7664-41-7		
				231-635-3		
	dermal	Short term (acut)	systemic	6.8	mg/kg/day	
	dermal	Long term (chronic)	systemic	6.8	mg/kg/day	
	inhalative	Short term (acut)	systemic	47.6	mg/m³	
	inhalative	Short term (acut)	local	36	mg/m³	
	inhalative	Long term (chronic)	systemic	47.6	mg/m³	
	inhalative	Long term (chronic)	local	14	mg/m³	

#### **DNEL value (consumer)**

No	Substance name	Substance name			
	Route of exposure	Exposure time	Effect	Value	
1	ammonia, anhydrous			7664-41-7	
				231-635-3	
	oral	Short term (acut)	systemic	6.8	mg/kg/day
	oral	Long term (chronic)	systemic	6.8	mg/kg/day
	dermal	Short term (acut)	systemic	68	mg/cm <sup>2</sup>
	dermal	Long term (chronic)	systemic	68	mg/cm <sup>2</sup>
	inhalative	Short term (acut)	systemic	23.8	mg/m³
	inhalative	Short term (acut)	local	7.2	mg/m³
	inhalative	Long term (chronic)	systemic	23.8	mg/m³
	inhalative	Long term (chronic)	local	2.8	mg/m³

#### **PNEC** values

No	Substance name		CAS / EC no	)
	ecological compartment Type		Value	
1	ammonia, anhydrous		7664-41-7	
	-		231-635-3	
	water	fresh water	0.0011	mg/L
	water	marine water	0.0011	mg/L

#### 8.2 Exposure controls

### Appropriate engineering controls

No data available.

#### Personal protective equipment

#### Respiratory protection

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

#### Eye / face protection

Safety glasses with side protection shield (EN 166)

#### **Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific 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.

#### Other

Normal chemical work clothing.

#### **Environmental exposure controls**

No data available.



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# SECTION 9: Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

Form/Colour		
liquid		
black		
Odour		
characteristic		



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Odour threshold	
No data available	

pH value

No data available

Boiling point / boiling range

No data available

Melting point / melting range

No data available

Decomposition point / decomposition range

No data available

Flash point

No data available

**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

No data available

Vapour density

No data available

**Evaporation rate** 

No data available

Relative density

No data available

Density

No data available

Solubility in water

No data available

Solubility(ies)

No data available

Part	Partition coefficient: n-octanol/water				
No	Substance name	CAS no.	EC no.		
1	1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9		
log I	Pow	1.3			
Sou	rce	Manufacturer			



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Viscosity	
No data available	

#### 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.

#### 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

Acu	Acute oral toxicity (result of the ATE calculation for the mixture)				
No	Product Name				
1	edding Porcelain marker ink (black) contained in:				
	edding 4200				
Com	ments	The result of the applied calculation method according to the			
		European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6,			
		Part 3 of Annex I is outside the values that imply a classification /			
labelling of this mixture according to table 3.1.1 defining		labelling of this mixture according to table 3.1.1 defining the			
		respective categories (ATE oral > 2000 mg/kg).			

Acute oral toxicity					
No	Substance name	CAS no.		EC no.	
1	1,2-benzisothiazol-3(2H)-one	2634-33-	.5	220-120-9	
LD50			1193	mg/kg bodyweight	
Species		rat			
Source		Manufacturer			

Acu	Acute dermal toxicity					
No	Substance name	CAS no.		EC no.		
1	1,2-benzisothiazol-3(2H)-one	2634-33-	5	220-120-9		
LD5	0		4115	mg/kg bodyweight		
Species		rat				
Source		Manufacturer				



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Acute inhalational toxicity (result of the ATE calculation for the mixture)				
No	Product Name			
1	edding Porcelain marker ink (black) contained in:			
	edding 4200			
Con	nments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE for inhalation: > 20.000 ppmV (gases), > 20 mg/l (vapours), > 5 mg/l (dusts/mists).		
Acu	ite inhalational toxicity			
No	data available			
Skii	n corrosion/irritation			
No	data available			
Ser	ious eye damage/irritation			
No (	data available			
Res	spiratory or skin sensitisation			
No (	data available			
Ger	m cell mutagenicity			
No (	data available			
Rep	production toxicity			
No	data available			
Car	cinogenicity			
No	data available			

# STOT - single exposure No data available

# STOT - repeated exposure

No data available

# **Aspiration hazard**

No data available

# SECTION 12: Ecological information

# 12.1 Toxicity

Toxicity to fish (acute)					
No	Substance name	CAS no.		EC no.	
1	1,2-benzisothiazol-3(2H)-one	2634-33-5		220-120-9	
LC5	0		2.18	mg/l	
Dura	ation of exposure		96	h	
Species		Oncorhynchus mykiss			
Met	nod	OECD 203			
Sou	rce	Manufacturer			

# **Toxicity to fish (chronic)**

No data available

Toxicity to Daphnia (acute)				
Substance name	CAS no.		EC no.	
1,2-benzisothiazol-3(2H)-one	2634-33-5		220-120-9	
50		2.94	mg/l	
ation of exposure		48	h	
cies	Daphnia magna			
nod	OECD 202			
rce	Manufacturer			
	Substance name 1,2-benzisothiazol-3(2H)-one 0 ation of exposure cies nod	Substance name CAS no.  1,2-benzisothiazol-3(2H)-one 2634-33-5 0 ation of exposure cies Daphnia magna OECD 202	Substance name CAS no.  1,2-benzisothiazol-3(2H)-one 2634-33-5  0 2.94 ation of exposure cies Daphnia magna OECD 202	



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# Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)					
No	Substance name	CAS no.		EC no.	
1	1,2-benzisothiazol-3(2H)-one	2634-33-5		220-120-9	
ErC:	50		0.11	mg/l	
Duration of exposure			72	h	
Species		Pseudokirchneriella subcapita	ta		
Method		OECD 201			
Sou	rce	Manufacturer			

#### Toxicity to algae (chronic)

No data available

# Bacteria toxicity No data available

#### 12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water					
No	Substance name	CAS no.	EC no.		
1	1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9		
log Pow		1.3			
Source		Manufacturer			

#### 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

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.



No 3

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# **SECTION 14: Transport information**

#### 14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

#### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

### 14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

#### 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.

# Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

## 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.



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

H221 Flammable gas.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation. H318 Causes serious eye damage.

H331 Toxic if inhaled.

H400 Very toxic to aquatic life.

# Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

U When put on the market gases have to be classified as 'Gases under pressure', in one of

the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be

assigned case by case.

#### Department issuing safety data sheet

UMCO GmbH

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This information is based on our present knowledge and experience.

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

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

#### Alterations/supplements:

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

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