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

#### 1.1 Product identifier

**Trade name** 

# edding Ink contained in: edding 8404 aerospace marker

## 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 drawliners

#### 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 Skin Irrit. 2; H315 Skin Sens. 1; H317

#### **Classification information**

Classification and labelling are based on toxicological studies performed on the product (mixture).

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



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**Hazard statements** 

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

**Precautionary statements** 

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

P102 Keep out of reach of children.

P280 Wear protective clothing/eye protection/face protection.

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**

Aqueous preparation

**Hazardous ingredients** 

No	Substance name		Additional information	
	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)	Concentration	%
	REACH no			
1	ethanediol			
	107-21-1	Acute Tox. 4*; H302	1.00 - 5.00	%-b.w.
	203-473-3			
	603-027-00-1			
	-			
2	propan-2-ol			
	67-63-0	Eye Irrit. 2; H319	0.10 - 1.00	%-b.w.
	200-661-7	Flam. Liq. 2; H225		
	603-117-00-0	STOT SE 3; H336		
	-			
3		vethyl)-1,3,5-triazinane		
	4719-04-4	Acute Tox. 4*; H302	0.10 - 1.00	%-b.w.
	225-208-0	Skin Sens. 1; H317		
	613-114-00-6			
	-			
4	ammonia, anhydro			
	7664-41-7	Acute Tox. 3*; H331	0.10 - 1.00	%-b.w.
	231-635-3	Aquatic Acute 1; H400		
	007-001-00-5	Flam. Gas 2; H221		
	-	Press. Gas		
		Skin Corr. 1B; H314		
5	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		
6	CARBON BLACK			
	1333-86-4	-	10.00 - 20.00	%-b.w.
	215-609-9			
	-			
	-			
C	T	and FLIH-phrases: pls. see section 16		

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



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No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
3	-	Skin Sens. 1; H317: C >= 0.1%	-	-
4	U	-	-	-
5	-	Skin Sens. 1; H317: C >= 0.05%	-	-

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).

# **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

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 ingestion

Rinse mouth thoroughly with water. 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

Foam; Carbon dioxide; Extinguishing powder; Water spray jet

#### Unsuitable extinguishing media

High power water jet

# 5.2 Special hazards arising from the substance or mixture

None known.

# 5.3 Advice for firefighters

Use self-contained breathing apparatus. 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.

#### 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.



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#### 6.3 Methods and material for containment and cleaning up

Take up with absorbent material (e.g., sand, kieselguhr, universal binder). When picked up, treat material as prescribed under heading "Disposal considerations".

#### 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). Observe the usual precautions for handling chemicals.

#### 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. Wash hands before breaks and after work.

## Advice on protection against fire and explosion

No special measures necessary.

# 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.

# Requirements for storage rooms and vessels

Store product in closed containers. Protect from heat and direct sunlight.

#### Advice on storage assembly

None known

#### 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) / E	H40			
	Carbon black				
	STEL	7	mg/m³		
	TWA	3.5	mg/m³		
2	ethanediol	107-21-1		203-473-3	
	2000/39/EWG				
	Ethylene glycol				
	STEL	104	mg/m³	40	ml/m³
	TWA	52	mg/m³	20	ml/m³
	Skin resorption / sensibilisation	Skin			
	List of approved workplace exposure limits (WELs) / E	H40			
	Ethane 1,2-diol				
	particulate				
	TWA	10	mg/m³		
	Skin resorption / sensibilisation	Sk			
	List of approved workplace exposure limits (WELs) / E	H40			
	Ethane 1,2-diol				
	vapour				
	STEL	104	mg/m³		
	TWA	52	mg/m³		
	Skin resorption / sensibilisation	Sk			
3	propan-2-ol	67-63-0		200-661-7	
	List of approved workplace exposure limits (WELs) / E	H40			
	Propan-2-ol	T			
	STEL	1250	mg/m³	500	ml/m³
	TWA	999	mg/m³	400	ml/m³
4	ammonia, anhydrous	7664-41-7		231-635-3	
	List of approved workplace exposure limits (WELs) / E	H40			
	Ammonia	T			
	STEL	25	mg/m³	35	ml/m³
	TWA	18	mg/m³	25	ml/m³
	2000/39/EWG				
	Ammonia, anhydrous				
	STEL	36	mg/m³	50	ml/m³
	TWA	14	mg/m³	20	ml/m³

# 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 (EN 166)



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#### Hand protection

In case of intensive contact, wear protective gloves (EN 374). 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

Form/Colour	
liquid	
black	
Odour	
No data available	
Odour threshold	
No data available	
pH value	
No data available	
Boiling point / boiling range	
Value	100 °C
Melting point / melting range	
No data available	
Decomposition point / decomposition range	
No data available	
Flash point	
Not applicable	



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**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

Remarks soluble

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 F	Pow	1.3				
Soul	rce	Manufacturer				

Viscosity

No data available

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).



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# 10.3 Possibility of hazardous reactions

No data available.

## 10.4 Conditions to avoid

No data available.

## 10.5 Incompatible materials

None known.

# 10.6 Hazardous decomposition products

No hazardous decomposition products known.

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

Acu	Acute oral toxicity				
No	Product Name				
1	edding lnk contained in: edding 8404 aerospace				
	marker	•			
LD5	0	>	5000	mg/kg	
Spec		rat			
Soul	rce	Manufacturer			

Acu	Acute dermal toxicity				
No	Product Name				
1	edding Ink contained in: edding 8404 aerospace				
	marker				
LD5	0	>	5000	mg/kg	
Spec	cies	rabbit		-	
Soul	rce	Manufacturer			

Acu	Acute inhalational toxicity				
No	Product Name				
1	edding Ink contained in: edding 8404 aerospace marker				
LC5	0	>		50000	mg/m³
State	e of aggregation	Dust/mist			
Spe	cies	rat			
Sou	ce	Manufacturer			
No	Substance name		CAS no.		EC no.
2	propan-2-ol		67-63-0		200-661-7
LC5	0			72.6	mg/l
Dura	ation of exposure			4	h
State	e of aggregation	Vapour			
Spe	cies	rat			
Sou	ce	Manufacturer			



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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

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Tox	Toxicity to fish (acute)					
No	Substance name	CAS no.		EC no.		
1	propan-2-ol	67-63-0		200-661-7		
LC5	0		9640	mg/l		
Dura	ation of exposure		96	h		
Spe	cies	Pimephales promelas				
Sou	rce	Manufacturer				
2	1,2-benzisothiazol-3(2H)-one	2634-33-5		220-120-9		
LC5	0		2.18	mg/l		
Dura	ation of exposure		96	h		
Spe	cies	Oncorhynchus mykiss				
Method		OECD 203				
Sou	rce	Manufacturer				

#### Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)				
No Substance name	CAS no.		EC no.	
1 propan-2-ol	67-63-0		200-661-7	
EC50		13299	mg/l	
Duration of exposure		48	h	
Species	Daphnia magna			
Source	Manufacturer			
2 1,2-benzisothiazol-3(2H)-one	2634-33-5		220-120-9	
EC50		2.94	mg/l	
Duration of exposure		48	h	
Species	Daphnia magna			
Method	OECD 202			
Source	Manufacturer			



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# **Toxicity to Daphnia (chronic)**

No data available

Toxi	icity to algae (acute)				Toxicity to algae (acute)					
No	Substance name	CAS no.		EC no.						
1	propan-2-ol	67-63-0		200-661-7						
EC5	0	>	1000	mg/l						
Dura	ation of exposure		72	h						
Spec	cies	Desmodesmus subspicatus								
Soul	rce	Manufacturer								
2	1,2-benzisothiazol-3(2H)-one	2634-33-5		220-120-9						
ErC!	50		0.11	mg/l						
Dura	ation of exposure		72	h						
Species		Pseudokirchneriella subcapitata								
Method		OECD 201								
Soul	rce	Manufacturer								

## Toxicity to algae (chronic)

No data available

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		
Valu	e		95	%		
Dura	ation		21	day(s)		
Meth	nod	OECD 301 E				
Sou	rce	Manufacturer				
Eval	uation	readily biodegradable				

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

Other	info	rmatio	n
0 11101		11114110	

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.



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#### **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

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.

No 3

# 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

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.



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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.

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness.

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 Umwelt Consult GmbH** 

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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.

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