Trade name: Ink, green contained in: edding 55, edding 88, edding 89

Current version : 1.0.0, issued: 30.05.2016 **Replaced version:** -, issued: - **Region:** GB

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

1.1 Product identifier

Trade name

Ink, green contained in: edding 55, edding 88, edding 89

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)
STOT RE 2; H373

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

GHS08

Signal word
Warning

Hazardous component(s) to be indicated on label:
diethylene glycol

Hazard statements
H373 May cause damage to organs through prolonged or repeated exposure

Hazard statements (EU)

EUH208	Contains 5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-Methyl-2,3-dihydro isothiazol-3-one (3:1). May produce an allergic reaction.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P260	Do not breathe vapours.
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)

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**diethylene glycol**			
	111-46-6 203-872-2 603-140-00-6 01-2119457857-21	Acute Tox. 4; H302 STOT RE 2; H373o	>= 10.00 - < 25.00	%-b.w.
2	**bronopol**			
	52-51-7 200-143-0 603-085-00-8 -	Acute Tox. 4*; H302 Acute Tox. 4*; H312 Aquatic Acute 1; H400 Eye Dam. 1; H318 Skin Irrit. 2; H315 STOT SE 3; H335	< 0.10	%-b.w.
3	**5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one and 2-Methyl-2,3-dihydro isothiazol-3-one (3:1)**			
	55965-84-9 - 613-167-00-5 -	Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3*; H331 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Skin Corr. 1B; H314 Skin Sens. 1; H317	< 0.0011	%-b.w.

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	-	-	M = 10	-
3	-	Skin Sens. 1; H317: C >= 0.0015% Skin Irrit. 2; H315: C >= 0.06% Eye Irrit. 2; H319: C >= 0.06% Skin Corr. 1B; H314: C >= 0.6%	M = 10	-

No	Route, target organ, concrete effect
1	H373 oral; kidneys; -

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
No data available.

5.2 Special hazards arising from the substance or mixture

None known.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Adapt extinguisher and fire-fighting measures to fire in the environment. 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.

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 at the work area (local exhaust ventilation, if necessary).

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.

Advice on storage assembly
Do not store together with: Oxidizing agents; Acids

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	**diethylene glycol**	**111-46-6**		**203-872-2**	
	List of approved workplace exposure limits (WELs) / EH40				
	2,2'-Oxydiethanol				
	TWA	101	mg/m³	23	ml/m³

DNEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**diethylene glycol**			**111-46-6** **203-872-2**	
	dermal	Long term (chronic)	systemic	43	mg/kg/day
	inhalative	Long term (chronic)	local	60	mg/m³
	inhalative	Long term (chronic)	systemic	44	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**diethylene glycol**			**111-46-6** **203-872-2**	
	dermal	Long term (chronic)	systemic	21	mg/kg/day
	inhalative	Long term (chronic)	local	12	mg/m³
	inhalative	Long term (chronic)	systemic	12	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	**Type**	**Value**	
1	**diethylene glycol**		**111-46-6** **203-872-2**	
	water	fresh water	10	mg/l
	water	marine water	1	mg/l
	water	fresh water sediment	20.9	mg/kg dry weight
	water	marine water sediment	2.09	mg/kg dry weight
	water	Aqua intermittent	10	mg/l
	soil	-	1.53	mg/kg dry weight
	sewage treatment plant	-	199.5	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 (EN 166)

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; green

Odour
odourless

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	
Remarks	miscible

Solubility(ies)
No data available

Partition coefficient: n-octanol/water			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**
log Pow	< 1		
Source	Manufacturer		

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
No data available.

10.3 Possibility of hazardous reactions
No data available.

10.4 Conditions to avoid
No data available.

10.5 Incompatible materials
Oxidizing agents; Acids

10.6 Hazardous decomposition products
No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**Ink, green contained in: edding 55, edding 88, edding 89**
Remarks	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 oral > 2000 mg/kg).

Acute oral toxicity
No data available

Acute dermal toxicity				
No	**Substance name**	**CAS no.**	**EC no.**	
1	**diethylene glycol**	**111-46-6**	**203-872-2**	
LD50		13300	mg/kg bodyweight	
Species	rabbit			
Source	ECHA			

Acute inhalational toxicity				
No	**Substance name**	**CAS no.**	**EC no.**	
1	**diethylene glycol**	**111-46-6**	**203-872-2**	
LC50	>	4.6	mg/l	
Duration of exposure		4	h	
State of aggregation	Dust/mist			
Species	rat			
Source	ECHA			
Evaluation/classification	Based on available data, the classification criteria are not met.			

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**

Species	rabbit
Source	ECHA
Evaluation	non-irritant

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**

Species	rabbit
Source	ECHA
Evaluation	non-irritant

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**

Route of exposure	Skin
Species	guinea pig
Method	67/548/EEC, B.6
Source	ECHA
Evaluation	non-sensitizing

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**

Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

STOT-single exposure

No data available

STOT-repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**

Route of exposure	oral	
NOAEL	100	mg/kg bw/d
Species	rat	
Target organ	kidneys	
Source	ECHA	
Effects	Causes damage to organs.	

Aspiration hazard

No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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	**diethylene glycol**	**111-46-6**		**203-872-2**
LC50			75200	mg/l
Duration of exposure			96	h
Species		Pimephales promelas		
Source		ECHA		

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**diethylene glycol**	**111-46-6**		**203-872-2**
EC50		>	10000	mg/l
Duration of exposure			48	h
Species		Daphnia magna		
Method		DIN 38412		
Source		Manufacturer		

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)
No data available

Toxicity to algae (chronic)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**diethylene glycol**	**111-46-6**		**203-872-2**
NOEC			2700	mg/l
Duration of exposure			8	day(s)
Species		Scenedesmus quadricauda		
Source		ECHA		

Bacteria toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**diethylene glycol**	**111-46-6**		**203-872-2**
EC20		>	1.995	mg/l
Duration of exposure			0.5	h
Species		activated sludge		
Method		ISO 8192		
Source		ECHA		

12.2 Persistence and degradability

Biodegradability				
No	**Substance name**	**CAS no.**		**EC no.**
1	**diethylene glycol**	**111-46-6**		**203-872-2**
Type		DOC decrease		
Value		90 -	100	%
Duration			28	day(s)
Method		OECD 301 B		
Source		ECHA		
Evaluation		readily biodegradable		

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**
BCF	100		
Species	Leuciscus idus		
Source	ECHA		

Partition coefficient: n-octanol/water			
No	**Substance name**	**CAS no.**	**EC no.**
1	**diethylene glycol**	**111-46-6**	**203-872-2**
log Pow	< 1		
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 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.

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.

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

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H373o	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Department issuing safety data sheet
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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.

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