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

Current version : 4.0.0, issued: 02.06.2020 **Replaced version:** 4.0.0, issued: 29.05.2020 **Region:** GB

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

1.1 Product identifier

Trade name

Ink, black 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 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)
Acute Tox. 4; H302

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

GHS07

Signal word
Warning

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

Hazard statement(s)
H302 Harmful if swallowed.

Hazard statements (EU)

EUH208	Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Precautionary statement(s)

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
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	>= 25.00 - < 50.00	%-b.w.
2	**2,2'-(methylimino)diethanol**			
	105-59-9 203-312-7 603-079-00-5 01-2119488970-24	Eye Irrit. 2; H319	< 5.00	%-b.w.
3	**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.
4	**reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)**			
	55965-84-9 - 613-167-00-5 -	Acute Tox. 2; H310 Acute Tox. 2; H330 Acute Tox. 3; H301 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 Eye Dam. 1; H318 Skin Corr. 1C; H314 Skin Sens. 1A; H317	< 0.0015	%-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)
3	-	-	M = 10	-

4	B	Skin Sens. 1A; H317: C >= 0.0015% Eye Irrit. 2; H319: C >= 0.06% Skin Irrit. 2; H315: C >= 0.06% Skin Corr. 1C; H314: C >= 0.6% Eye Dam. 1; H318: C >= 0.6%	M = 100	M = 100

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

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 collected, handle material as described under the section 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.

Incompatible products
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				
	WEL long-term (8-hr TWA reference period)	101	mg/m³	23	ppm

DNEL, DMEL 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
2	**2,2'-(methylimino)diethanol**			**105-59-9** **203-312-7**	
	dermal	Long term (chronic)	systemic	19	mg/kg/day
	inhalative	Long term (chronic)	systemic	26	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
2	**2,2'-(methylimino)diethanol**			**105-59-9** **203-312-7**	
	oral	Long term (chronic)	systemic	1.9	mg/kg/day
	dermal	Long term (chronic)	systemic	9.4	mg/kg/day
	inhalative	Long term (chronic)	systemic	6.5	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
2	**2,2'-(methylimino)diethanol**		**105-59-9** **203-312-7**	
	water	fresh water	0.1	mg/L
	water	marine water	0.0045	mg/L
	water	Aqua intermittent	1	mg/L
	water	fresh water sediment	0.78	mg/kg dry weight
	water	marine water sediment	0.0351	mg/kg dry weight
	soil	-	0.097	mg/kg dry weight
	sewage treatment plant	-	10	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

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	
Comments	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		
2	**2,2'-(methylimino)diethanol**	**105-59-9**		**203-312-7**
log Pow			-1.16	
Reference temperature			23	°C
Method		OECD 107		
Source		ECHA		

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, black contained in: edding 55, edding 88, edding 89**
ATE (Mixture)	1666.67
Method	Calculation method according Regulation (EC) No 1272/2008, (CLP), annex I, part 3, section 3.1.3.6.

Acute oral toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**2,2'-(methylimino)diethanol**	**105-59-9**		**203-312-7**
LD50			4680	mg/kg bodyweight
Species		rat		
Method		OECD 401		
Source		ECHA		

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		
2	**2,2'-(methylimino)diethanol**	**105-59-9**	**203-312-7**
Species	rabbit		
Method	OECD 404		
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		
2	**2,2'-(methylimino)diethanol**	**105-59-9**	**203-312-7**
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	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		
2	**2,2'-(methylimino)diethanol**	**105-59-9**	**203-312-7**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
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.		
2	**2,2'-(methylimino)diethanol**	**105-59-9**	**203-312-7**
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.		
2	2,2'-(methylimino)diethanol	105-59-9	203-312-7
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
Evaluation/classification	Based on available data, the classification criteria are not met.		
2	2,2'-(methylimino)diethanol	105-59-9	203-312-7
Route of exposure	dermal		
NOEL		100	mg/kg bw/d
Duration of exposure		90	day(s)
Species	rat		
Method	OECD 411		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

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		
2	2,2'-(methylimino)diethanol	105-59-9	203-312-7
LC50		1466	mg/l
Duration of exposure		96	h
Species	Leuciscus idus		
Method	DIN 38412		
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			
2	**2,2'-(methylimino)diethanol**	**105-59-9**	**203-312-7**	
EC50		233	mg/l	
Duration of exposure		48	h	
Species	Daphnia magna			
Method	440/2008/EC C.2.			
Source	ECHA			

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)				
No	**Substance name**	**CAS no.**	**EC no.**	
1	**2,2'-(methylimino)diethanol**	**105-59-9**	**203-312-7**	
EC50	>	100	mg/l	
Duration of exposure		72	h	
Species	Desmodesmus subspicatus			
Method	DIN 38412			
Source	ECHA			

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			
2	**2,2'-(methylimino)diethanol**	**105-59-9**	**203-312-7**	
Type	aerobic biodegradation			
Value		96	%	
Duration		18	day(s)	
Method	OECD 301 A			
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			
2	**2,2'-(methylimino)diethanol**	**105-59-9**		**203-312-7**
log Pow		-1.16		
Reference temperature		23	°C	
Method	OECD 107			
Source	ECHA			

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

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.

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

EUH071	Corrosive to the respiratory tract.
H301	Toxic if swallowed.
H310	Fatal 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.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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

B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid … %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

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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