

Trade name: edding Flipchart Marker Ink (black, green) contained in: edding 31, edding 32

Current version : 2.2.0, issued: 02.03.2015

Replaced version: 2.1.0, issued: 27.02.2015

Region: GB

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

1.1 Product identifier

Trade name

edding Flipchart Marker Ink (black, green) contained in: edding 31, edding 32

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 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

STOT RE 2; H373

Classification in accordance with Directive 67/548/EEC or 1999/45/EC

R43

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms



GHS07



GHS08

Signal word

Warning

Hazardous component(s) to be indicated on label:

diethylene glycol

Trisodium 5-hydroxy-1-(4-sulphophenyl)-4-(4-sulphophenylazo)pyrazole-3-carboxylate

Hazard statements

H317

May cause an allergic skin reaction.

H373

May cause damage to organs through prolonged or repeated exposure

Hazard statements (EU)

EUH208

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

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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 vapour.
- P280 Wear protective gloves/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

Mixture (preparation)

Hazardous ingredients

No	Substance name	Classification	Classification (EC)	Additional information	%
	CAS / EC / Index / REACH no	67/548/EEC	1272/2008 (CLP)	Concentration	
1	diethylene glycol				
	111-46-6 203-872-2 603-140-00-6 01-2119457857-21	Xn; R22	Acute Tox. 4; H302 STOT RE 2; H373o	> 10.00 - < 30.00	%-b.w.
2	Trisodium 5-hydroxy-1-(4-sulphophenyl)-4-(4-sulphophenylazo)pyrazole-3-carboxylate				
	1934-21-0 217-699-5 - -	R43	Skin Sens. 1; H317	> 1.00 - < 5.00	%-b.w.
3	bronopol				
	52-51-7 200-143-0 603-085-00-8 -	Xn; R21/22 Xi; R37/38 Xi; R41 N; R50	Acute Tox. 4*; H302 Acute Tox. 4*; H312 Aquatic Acute 1; H400 Eye Dam. 1; H318 Skin Irrit. 2; H315 STOT SE 3; H335	< 0.50	%-b.w.
4	5-Chlor-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 -	T; R23/24/25 C; R34 R43 N; R50/53	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	< 0.06	%-b.w.

Full Text for all R-phrases, 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	-	Skin Sens. 1; H317: C >= 0.0015% Eye Irrit. 2; H319: C >= 0.06% Skin Irrit. 2; H315: C >= 0.06% Skin Corr. 1B; H314: C >= 0.6%	-	-

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

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 lens. 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

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

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.

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".

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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).

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/m ³ 23 ml/m ³

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	106 mg/kg/day
	inhalative	Long term (chronic)	local	60 mg/m ³

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	53 mg/kg/day
	inhalative	Long term (chronic)	local	12 mg/m ³

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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
Odour
odourless

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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			
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		

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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

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	edding Flipchart Marker Ink (black, green) contained in: edding 31, edding 32
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.		

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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		kidney	
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.			

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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		

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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 73/78 and the IBC Code

Not relevant

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

Remarks: Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 1999/45/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/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 R-, H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

R21/22	Harmful in contact with skin and if swallowed.
R22	Harmful if swallowed.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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.
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.

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Department issuing safety data sheet

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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.