

**Trade name:** edding color-change ink (red -> yellow), contained in: edding 13

**Current version :** 1.1.0, issued: 27.08.2020

**Replaced version:** 1.0.1, issued: 22.02.2017

**Region:** GB

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

### 1.1 Product identifier

**Trade name**

**edding color-change ink (red -> yellow), contained in: edding 13**

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

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

For professional use only

Ink for use in felt pens

**Uses advised against**

Consumer use

### 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)**

Aquatic Chronic 3; H412

**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**

-

**Hazard statement(s)**

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statement(s)**

P273 Avoid release to the environment.

P501 Dispose of contents/container to a facility in accordance with local and national regulations.

### 2.3 Other hazards

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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	ethanediol		
	107-21-1 203-473-3 603-027-00-1 01-2119456816-28	Acute Tox. 4; H302 STOT RE 2; H373o	< 2.50
2	2-[2-(2,3-dihydro-2-methyl-1H-indol-1-yl)vinyl]-1,3,3-trimethyl-3H-indolium chloride		
	6359-50-8 228-800-7 - -	Acute Tox. 3; H301 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Dam. 1; H318 Skin Irrit. 2; H315	< 0.50

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

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 and launder thoroughly before reusing.

##### After inhalation

Ensure supply of fresh air.

##### After skin contact

In case of contact with skin wash off immediately with copious amounts of 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. 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

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### 5.1 Extinguishing media

#### Suitable extinguishing media

Foam; Carbon dioxide; Dry chemical extinguisher; Water mist

#### 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 (CO<sub>2</sub>); 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.

#### 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

Keep away from sources of heat and ignition. Take precautionary measures against static charges.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place.

#### Requirements for storage rooms and vessels

Store product in closed containers.

### 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	ethanediol	107-21-1	203-473-3
	2000/39/EC		

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Ethylene glycol					
WEL short-term (15 min reference period)		104	mg/m <sup>3</sup>	40	ppm
WEL long-term (8-hr TWA reference period)		52	mg/m <sup>3</sup>	20	ppm
Skin resorption / sensibilisation		Skin			
<b>List of approved workplace exposure limits (WELs) / EH40</b>					
Ethane-1,2-diol vapour					
WEL short-term (15 min reference period)		104	mg/m <sup>3</sup>	40	ppm
WEL long-term (8-hr TWA reference period)		52	mg/m <sup>3</sup>	20	ppm
Comments		Sk			
<b>List of approved workplace exposure limits (WELs) / EH40</b>					
Ethane-1,2-diol particulate					
WEL long-term (8-hr TWA reference period)		10	mg/m <sup>3</sup>		
Comments		Sk			

### DNEL, DMEL and PNEC values

#### DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	ethanediol			107-21-1 203-473-3	
	dermal	Long term (chronic)	systemic	106	mg/kg/day
	inhalative	Long term (chronic)	local	35	mg/m <sup>3</sup>

#### DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	ethanediol			107-21-1 203-473-3	
	dermal	Long term (chronic)	systemic	53	mg/kg/day
	inhalative	Long term (chronic)	local	7	mg/m <sup>3</sup>

#### PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	ethanediol		107-21-1 203-473-3	
	water	fresh water	10	mg/L
	water	marine water	1	mg/L
	water	Aqua intermittent	10	mg/L
	water	fresh water sediment	37	mg/kg dry weight
	water	marine water sediment	3.7	mg/kg dry weight
	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.

#### 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 work-

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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. 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

<b>Form/Colour</b>	
liquid	
red	
<b>Odour</b>	
odourless	
<b>Odour threshold</b>	
No data available	
<b>pH value</b>	
Value	3 - 5
<b>Boiling point / boiling range</b>	
No data available	
<b>Melting point / melting range</b>	
No data available	
<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
Value	> 100 °C
<b>Auto-ignition temperature</b>	
No data available	
<b>Oxidising properties</b>	
No data available	
<b>Explosive properties</b>	
No data available	
<b>Flammability (solid, gas)</b>	
No data available	
<b>Lower flammability or explosive limits</b>	
No data available	
<b>Upper flammability or explosive limits</b>	
No data available	
<b>Vapour pressure</b>	
No data available	
<b>Vapour density</b>	
No data available	
<b>Evaporation rate</b>	

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No data available			
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	0.95	- 1.05	kg/l
<b>Solubility in water</b>			
Comments	soluble		
<b>Solubility(ies)</b>			
No data available			
<b>Partition coefficient: n-octanol/water</b>			
<b>No</b>	<b>Substance name</b>	<b>CAS no.</b>	<b>EC no.</b>
1	ethanediol	107-21-1	203-473-3
log Pow		-1.36	
Reference temperature		25	°C
Source	ECHA		
<b>Viscosity</b>			
No data available			

## 9.2 Other information

<b>Other information</b>
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

No data available.

### 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

<b>Acute oral toxicity (result of the ATE calculation for the mixture)</b>	
<b>No</b>	<b>Product Name</b>
1	edding color-change ink (red -> yellow), contained in: edding 13
Comments	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).
<b>Acute oral toxicity</b>	
No data available	

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Acute dermal toxicity	
No data available	

Acute inhalational toxicity	
No data available	

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
Duration of exposure		20	h
Species		rabbit	
Source		ECHA	
Evaluation		non-irritant	

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
Duration of exposure		24	h
Species		rabbit	
Source		ECHA	
Evaluation		non-irritant	

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
Route of exposure		Skin	
Species		guinea pig	
Source		ECHA	
Evaluation		non-sensitizing	

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
Type of examination		Bacterial Reverse Mutation Test	
Species		Salmonella typhimurium: TA 1535, TA 1537, TA 98, TA 100; Escherichia coli WP2 uvrA	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
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	ethanediol	107-21-1	203-473-3
Route of exposure		oral	
NOAEL		150	mg/kg bw/d
Duration of exposure		12	months
Species		rat	
Target organ		kidneys	

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Method	OECD 452
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are met.

<b>Aspiration hazard</b>
No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
LC50	>	72860	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Source	ECHA		

<b>Toxicity to fish (chronic)</b>
No data available

<b>Toxicity to Daphnia (acute)</b>			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
EC50	>	100	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

<b>Toxicity to Daphnia (chronic)</b>
No data available

<b>Toxicity to algae (acute)</b>
No data available

<b>Toxicity to algae (chronic)</b>
No data available

<b>Bacteria toxicity</b>
No data available

### 12.2 Persistence and degradability

<b>Biodegradability</b>			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
Type	DOC decrease		
Value	90	- 100	%
Duration		10	day(s)
Method	OECD 301 A		
Source	ECHA		
Evaluation	readily biodegradable		

### 12.3 Bioaccumulative potential

<b>Partition coefficient: n-octanol/water</b>			
No	Substance name	CAS no.	EC no.
1	ethanediol	107-21-1	203-473-3
log Pow		-1.36	
Reference temperature		25	°C
Source	ECHA		

### 12.4 Mobility in soil

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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

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The product is considered being subject to REACH regulation (EC) 1907/2006 annexe XVII.	No 3
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<b>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances</b>
This product is not subject to Part 1 or 2 of Annex I.

<b>Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)</b>	
VOC-value	0.60 %

## 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.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

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 section.

### 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.
H315	Causes skin irritation.
H318	Causes serious eye damage.
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.

### Creation of the 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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