

Affected products: 86625021/86625022/86625023/86625024/86625025/86625026/86625027

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Commercial Product Name: Eco solvent based ink

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

Specific use(s): Toner

Ink

1.3. Details of the supplier of the safety data sheet

Company: Murrplastik Systemtechnik GmbH

Dieselstraße 10

71570 Oppenweiler, Germany

Tel. +49-7191-482-832

E-mail: werner.tubach@murrplastik.de

1.4. Emergency telephone number

Emergency telephone: PTS, Göttingen: 0551-19240 (Germany only)
Further directories of Poison Information Services: www.who.int/ipcs/poisons/centre/directory/en

### 2. HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EU) 1272/2008/EC

CLP-Classification: Not applicable yet (01/06/2015)

Mixture: CLP classification not requested

2.1.2. Classification according to EU Directives 67/548/EC or 1999/45/EC

Classification: The product is classified as dangerous in accordance with Directive 1999/45/EC.

Repr.Cat.1; R60 Repr.Cat.1: R61

Repr.Cat.1; R61 Xi; R36

**R67** 

Full text of R-phrases: see section 16.

2.2 Label elements

2.2.1. Labelling according to Regulation (EU) 1272/2008

Mixture: CLP classification not requested

2.2.2. Labelling according to Directives (67/548/EEC - 1999/45/EC)

Symbol(s):

T-Toxic

Contains: 2-ethoxyethanol

R-phrase(s): R36 – Irritating to eyes.

R60 – May impair fertility.

R61 - May cause harm to the unborn child.

R67 - Vapours may cause drowsiness and dizziness.

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S-phrases: S36/37 – Wear suitable protective clothing and gloves.

S45 - In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible).

S53 – Avoid exposure - obtain special instructions before use.

### 2.3. Other hazards

Other hazards which do not result in classification: Results of PBT and vPvB assessment. This information is not available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substances

Not applicable

### 3.2. Mixtures

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
4-hydroxy-4-methylpentan-2-one	(CAS No.) 123-42-2 (EC No) 204-626-7 (EC Index) 603-016-00-1	0 – 15	Xi; R36
2-ethoxyethanol Included in REACH Candidate List	(CAS No.) 110-80-5 (EC No) 203-804-1 (EC Index) 603-012-00-X	0 – 10	R10 Repr.Cat.2; R60-61 Xn; R20/21/22
Dye		<= 10	Not classified
1-methoxy-2-propanol	(CAS No.) 107-98-2 (EC No) 203-539-1 (EC Index) 603-064-00-3	>= 0	R10 R67

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4-hydroxy-4-methylpentan-2-one	(CAS No.) 123-42-2 (EC No) 204-626-7 (EC Index) 603-016-00-1	0 – 15	Eye Irrit. 2, H319
2-ethoxyethanol Included in REACH Candidate List	(CAS No.) 110-80-5 (EC No) 203-804-1 (EC Index) 603-012-00-X	0 – 10	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Repr. 1B, H360FD
Dye		<= 10	Not classified
1-methoxy-2-propanol	(CAS No.) 107-98-2 (EC No) 203-539-1 (EC Index) 603-064-00-3	>= 0	Flam. Liq. 3, H226 STOT SE 3, H336

Full text of R-, H- and EUH-phrases: See section 16.

### 4. FIRST AID MEASURES

## 4.1. Description of first aid measures

Inhalation: Keep at rest.

Move to fresh air.

Consult a physician if necessary.

Skin contact: Take off all contaminated clothing immediately.

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Wash off with soap and water. Consult a physician if necessary.

Wash contaminated clothing before re-use.

Consult a physician if necessary.

Eye contact: Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

Consult a physician if necessary.

Ingestion: Rinse mouth.

> Drink 1 or 2 glasses of water. Do NOT induce vomiting. Obtain medical attention.

Additional advice: First aider needs to protect himself.

See also section 8.

Never give anything by mouth to an unconscious person. Show this safety data sheet to the doctor in attendance.

Treat symptomatically.

4.2. Most important symptoms and effects, both acute and delayed

May cause irritation of respiratory tract. Inhalation:

Vapours may cause drowsiness and dizziness.

Skin contact: Irritating to skin. Skin contact may provoke the following symptoms:

Redness. Swelling of the skin.

Eye contact: Irritating to eyes.

Ingestion: Ingestion may cause nausea, stomach-ache. Aspiration hazard if swal-

lowed - can enter lungs and cause damage.

4.3. Indication of immediate medical attention and special treatment needed

No data available.

### 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Use dry chemical, CO2, water spray or alcohol resistant foam.

Extinguishing media which shall not be used for

safety reasons: High volume water jet.

5.2. Special hazards arising from the substance or mixture

Fire Hazard:

Take precautionary measures against static discharges. Possible de-Specific hazards:

> composition products are: COx Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

5.3. Advice for firefighters

Special protective equipment for firefighters. Wear self contained Advice for firefighters:

breathing apparatus for fire fighting if necessary. In the event of fire,

cool tanks with water spray.

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### 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Evacuate personnel to safe areas. Wear personal protective equipment.

Avoid contact with skin and eyes. Do not breathe vapour.

Advice for emergency responders: Only qualified personnel equipped with suitable protective equipment

may intervene.

6.2. Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Soak up with inert Methods for cleaning up:

absorbent material (e.g. sand, silica gel, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal. Dispose of

in accordance with local regulations.

6.4. Reference to other sections

See also section 8. See also section 13.

### 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling: Ensure adequate ventilation. Avoid contact with skin, eyes and cloth-

> ing. Take precautionary measures against static discharges. Take care to avoid waste and spillage when weighing, loading and mixing the

product.

Handle in accordance with good industrial hygiene and safety practice. Hygiene measures:

> Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Remove and wash contami-

nated clothing before re-use.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry, cool and well-ventilated place. Keep Storage: locked-up. Do not store near or with any of the incompatible materials

listed in section 10.

7.3. Specific end use(s)

No data available

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Exposure limit(s):

1-methoxy-2-propanol (107-98-2) Component: TLV-TWA (ppm): 100 (BE, GB, DE, ES); 50 (FR, SE)

375 (BE, ES, NL, GB, PT, SI, HR); 370 (DE, FI); 190 (SE); 185 (DK, NO); TLV-TWA (mg/m³):

188 (FR)

TLV-STEL (ppm): 150 (BE, GB, ES); 100 (FR); 75 (SE)

TLV-STEL (mg/m³): 568 (BE, ES, PT); 560 (FI, GB); 563 (NL); 300 (SE); 375 (FR)

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Component: 4-hydroxy-4-methylpentan-2-one (123-42-2)

TLV-TWA (ppm): 100 (BE, GB, DE, ES); 50 (FR, SE)

TLV-TWA (mg/m<sup>3</sup>): 375 (BE, ES, NL, GB, PT, SI, HR); 370 (DE, FI); 190 (SE); 185 (DK, NO); 188 (FR)

TLV-STEL (ppm): 150 (BE, GB, ES); 100 (FR); 75 (SE)

TLV-STEL (mg/m³): 568 (BE, ES, PT); 560 (FI, GB); 563 (NL); 300 (SE); 375 (FR)

Component: 4-hydroxy-4-methylpentan-2-one (123-42-2)

TLV-TWA (ppm): 50 (FR, GB, BE, ES); 20 (DE); 25 (SE)

TLV-TWA (mg/m³): 240 (FR, Slovenia, Finland, Greece, Poland); 241 (GB, BE, Croatia, ES);

96 (DE); 120 (SE, Estonia, Lithuania); 200 (Czech Republic)

75 (GB); 50 (SE) TLV-STEL (ppm):

TLV-STEL (mg/m³): 240 (SE, Estonia, Lithuania); 360 (Finland, Greece); 362 (GB, Croatia);

300 (Czech Republic)

Recommended monitoring procedures: Personal monitoring, Concentration measurement in air.

8.2. Exposure controls

The type of protective equipment must be selected according to the Personal protective equipment:

concentration and amount of the dangerous substance at the specific

workplace.

Respiratory protection: Not required under normal use.

Hand protection: Not required under normal use. The selection of specific gloves for a

> specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the

instructions/specification of the supplier of gloves.

Eye protection: Not required under normal use. Skin and body protection: Not required under normal use.

Thermal hazard protection: Not required under normal use. Use dedicated equipment.

Engineering measures: Ensure adequate ventilation. Organisational measures to prevent/limit

releases, dispersion and exposure: See also section 7.

Environmental exposure controls: Do not flush into surface water or sanitary sewer system. Comply with

applicable Community environmental protection legislation.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance: Liquid, Toner cartridge

Colour: Black Odour: Slight

Odour threshold (mg/m3): No data available mg/m3

No data available pH: Melting point/range: No data available Freezing point No data available °C

Boiling point/boiling range: 140 - 160 °C > 80 °C Flash point:

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**Evaporation rate:** No data available Flammability (solid, gas): Not applicable **Explosion limits:** Not applicable Vapour pressure: No data available No data available Vapour density: Relative density: No data available Water solubility: Soluble < 80% (20°C) Partition coefficient: n-octanol/water: No data available

Autoignition temperature: None

No data available °C Decomposition temperature: Viscosity: No data available Explosive properties: Not applicable Oxidizing properties: Not applicable

9.2. Other information

Pour point: Not applicable °C

### 10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity: Stable under normal conditions. See also section 10.5

10.2. Chemical stability

Stable under normal conditions. Stability:

10.3. Possibility of hazardous reactions

Hazardous reactions: None under normal processing.

10.4. Conditions to avoid

Conditions to avoid: Remove all sources of ignition. Take precautionary measures against

static discharge. See also section 7 Handling and storage.

10.5. Incompatible materials

Incompatible materials: Incompatible with oxidizing agents.

See also section 7 Handling and storage

10.6. Hazardous decomposition products

Hazardous decomposition products: Carbon oxides

### 11. TOXICOLOGICAL INFORMATION

## 11.1. Information on toxicological effects

Not classified. (Not classified due to data which are conclusive al-Acute toxicity:

though insufficient for classification).

1-methoxy-2-propanol (107-98-2)		
LD50/oral/rat	> 5000 mg/kg	
LD50/dermal/rabbit	13000 mg/kg	
LC50/inhalation/4h/rat (ppm)	10000 ppm/4h	

4-hydroxy-4-methylpentan-2-one (123-42-2)	
LD50/oral/rat	4000 mg/kg

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2-ethoxyethanol (110-80-5)			
LD50/oral/rat	2125 mg/kg		
Irritation:	Irritating to eyes. pH: no data available		
Corrosivity:	Not classified (Not classified due to data which are conclusive although insufficient for classification). pH: no data available.		
Sensitisation:	Not classified (Not classified due to data which are conclusive although insufficient for classification).		
Repeated dose toxicity:	Not classified (Not classified due to data which are conclusive although insufficient for classification).		
Carcinogenicity:	Not classified (Not classified due to data which are conclusive although insufficient for classification).		
Mutagenicity:	Not classified (Not classified due to data which are conclusive although insufficient for classification.)		
Reproductive toxicity:	May impair fertility. May cause harm to the unborn child.		

### 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Component: 1-methoxy-2-propanol (107-98-2) LC50/96h/fish: 4600 mg/l (Leuciscus idus) EC50/48h/daphnia: > 500 mg/l (Daphnia magna)

Component: 4-hydroxy-4-methylpentan-2-one (123-42-2) LC50/96h/fish: 420 mg/l (Lepomis macrochirus, Menidia beryllina)

Component: 2-ethoxyethanol (110-80-5)

LC50/96h/fish: > 1000 mg/l (Lepomis macrochirus)

EC50/48h/daphnia: > 1000 mg/l

IC50/72h/algae: > 1000 mg/l (Scenedesmus subspicatus)

12.2. Persistence and degradability

Persistence and degradability: No data is available on the product itself.

12.3. Bioaccumulative potential

Bioaccumulation: No data is available on the product itself.

Partition coefficient: n-octanol/water: No data available

12.4. Mobility in soil

Mobility: No data available

12.5.Results of PBT and vPvB assessment

PBT/vPvB: No data available

12.6. Other adverse effects

Further information: Not applicable

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### 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues / unused products: Handle with care. See also section 7 Do not empty into drains. Where

possible recycling is preferred to disposal or incineration. Dispose of in

accordance with local regulations.

Contaminated packaging: If recycling is not practicable, dispose of in compliance with local regu-

lations.

Codes of waste (2001/573/EC, Waste codes should be assigned by the user, preferably in discussion 75/442/EEC, 91/689/EEC)

with the waste disposal authorities. The following Waste Codes are

only suggestions: 08 03 12\*

### 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

### 15. REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Authorisations/Restrictions on use: Restricted to professional users.

This product contains an ingredient according to the candidate list of Annex XIV of the REACH

Regulation1907/2006/EC .: 2-ethoxyethanol.

15.1.2. National regulations

WGK: 1

### 15.2. Chemical Safety Assessment

Chemical Safety Assessment: Not required

### **16. OTHER INFORMATION**

Full text of R-, H- and EUH-phrases

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Acute Tox. 4 (Dermal): Acute toxicity (dermal) Category 4 Acute Tox. 4 (Inhalation): Acute toxicity (inhalation) Category 4

Acute Tox. 4 (Oral): Acute toxicity Category 4

Eye Irrit. 2: Serious eye damage/eye irritation Category 2

Flam. Liq. 3: Flammable liquids Category 3 Repr. 1B: Reproductive toxicity Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) Category 3

H226: Flammable liquid and vapour.

H302: Harmful if swallowed. H312: Harmful in contact with skin. H319: Causes serious eve irritation.

H332: Harmful if inhaled.

H336: May cause drowsiness or dizziness.

H360FD: May damage fertility. May damage the unborn child.

R10:

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

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R36: Irritating to eyes. R60: May impair fertility.

R61: May cause harm to the unborn child.

R67: Vapours may cause drowsiness and dizziness.

Sources of key data

used to compile the datasheet: European Chemicals Bureau: ecb.jrc.it

Safety datasheet sections which have been updated:

2, 3, 11, 15, 16

Abbreviations and acronyms: Very persistent and very bioaccumulating (vPvB).

Persistent, bioaccumulating and toxic (PBT).

Short term exposure limit (STEL).

Threshold limits (TLV).

Time weighted average (TWA).

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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