



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 1 of 26

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

1.1 Identification of the substance/preparation

Trade name Transparent Glass Paint
Article No. 45201 – 45219, 45301, 45302, 45305 – 45307, 45311 / 45600 / 452144
Package size 20 ml, 50 ml / 6 x 20 ml / 144 x 20 ml, 33 x 50 ml, 12 x 20 ml
Substance name -
INDEX No. -
EG No. -
CAS No. -
REACH Registration No.-

1.2 Use of the substance/preparation

Transparent glass paints are ideal for painting on glass, acrylic glass, metal, wood and various plastics. For artists and hobby user.

1.3 Manufacturer/Supplier

C. KREUL GmbH & Co. KG
Carl-Kreul-Strasse 2
D-91352 Hallerndorf
Phone no. +49 (0) 9545 925-0
Fax no. +49 (0) 9545 925-511
Mail info@c-kreul.de

Information provided by

Mrs. Treiber, b.treiber@c-kreul.de

1.4 Emergency information

Phone no. +49 (0) 9545 925-0
Fax no. +49 (0) 9545 925-511

(Monday – Sunday: 24 hours)

2. HAZARD IDENTIFICATION

2.1 Classification of the substance/preparation

Classification according to Regulation (EC) 1272/2008

Article no. 45201, 45202, 45204 – 45206, 45209 – 45212, 45218, 45219, 45301, 45302, 45305 – 45306, 45311: Flam. Liq. 3 H226; STOT SE 3 H336

Article no. 45203, 45207, 45307, 45208: Flam. Liq. 3 H226; STOT SE 3 H336; Aquatic Chronic 3 H412

Article no. 45216: Flam. Liq. 3 H226; Skin Irrit. 2 H315; STOT SE 3 H336; Aquatic Chronic 2 H411

Article no 45215, 45217: Flam. Liq. 3 H226; Skin Irrit. 2 H315; STOT SE 3 H336; Aquatic Acute 1 H400; Aquatic Chronic 2 H411



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 2 of 26

Classification according to Regulation (EC) 67/548 or Regulation (EC) 1999/45

Article no. 45201, 45202, 45204 - 45206, 45209 - 45212, 45218, 45219, 45301, 45302, 45305, 45306, 45311: R10, R67

Article no. 45203, 45207, 45208, 45307: R10, R52/53, R67

Article no. 45215 - 45217: R10, N R51/53, R66, R67

2.2 Labelling according to Regulation (EC) 1272/2008 or Regulation (EC) 1999/45

Article no. 45201, 45202, 45204 - 45206, 45209 - 45212, 45218, 45219, 45301, 45302, 45305 - 45306, 45311:

Labelling according to Regulation (EC) 1272/2008

Hazard pictogram and signal word of the product



Warning

Hazard-determining components of labelling

1-Methoxy-2-propanol, CAS 107-98-2

Hazard statements

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

European hazard statements

EUH -

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P271 Use only outdoors or in a well-ventilated area.

P501 Dispose of contents/container to hazardous or special waste collection point.

Article no. 45203, 45207, 45307, 45208:

Labelling according to Regulation (EC) 1272/2008

Hazard pictogram and signal word of the product



Warning

Hazard-determining components of labelling

1-Methoxy-2-propanol, CAS 107-98-2

Hazard statements

H226 Flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 3 of 26

European hazard statements

EUH -

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P271 Use only outdoors or in a well-ventilated area.
P501 Dispose of contents/container to hazardous or special waste collection point.

Article no. 45216:

Labelling according to Regulation (EC) 1272/2008

Hazard pictogram and signal word of the product



Warning

Hazard-determining components of labelling

Naphtha (petroleum), hydrodesulfurized heavy, CAS 64742-82-1

Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

European hazard statements

EUH208 Contains 2-butanone oxime. 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.
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+350 IF ON SKIN: Gently wash with plenty of soap and water.
P370+378 In case of fire: Use sand, CO₂, dry powder for extinction.
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to hazardous or special waste collection point.

Article no. 45215, 45217:

Labelling according to Regulation (EC) 1272/2008

Hazard pictogram and signal word of the product



Warning



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 4 of 26

Hazard-determining components of labelling

Naphtha (petroleum), hydrodesulfurized heavy, CAS 64742-82-1

Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

European hazard statements

EUH208 Contains 2-butanone oxime. 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.
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+350 IF ON SKIN: Gently wash with plenty of soap and water.
P370+378 In case of fire: Use sand, CO₂, dry powder for extinction.
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container to hazardous or special waste collection point.

Labelling according to Regulation (EC) 67/548 or Regulation (EC) 1999/45

Article no. 45201, 45202, 45204 - 45206, 45209 - 45212, 45218, 45219, 45301, 45302, 45305, 45306, 45311:

Danger symbol and danger designation of the product

Flammable.

Hazard-determining components of labelling

-

Risk-phrases

10 Flammable.
67 Vapours may cause drowsiness and dizziness.

Safety-phrases

2 Keep out of the reach of children.
23 Do not breathe fumes/aerosol.
29/56 Do not empty into the drains, dispose of this material and its container at hazardous or special waste collection point.
43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent.
46 If swallowed seek medical advice immediately and show this container or label.



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 5 of 26

Article no. 45203, 45207, 45208, 45307:

Danger symbol and danger designation of the product

Flammable.

Hazard-determining components of labelling

-

Risk-phrases

- 10 Flammable.
- 52/53 Harmful for the aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 67 Vapours may cause drowsiness and dizziness.

Safety-phrases

- 2 Keep out of the reach of children.
- 23 Do not breathe fumes/aerosol.
- 29/56 Do not empty into the drains, dispose of this material and its container at hazardous or special waste collection point.
- 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent.
- 46 If swallowed seek medical advice immediately and show this container or label.

Article no. 45215 - 45217:

Danger symbol and danger designation of the product



Flammable  Dangerous for the environment

Hazard-determining components of labelling

-

Risk-phrases

- 10 Flammable.
- 51/53 Toxic for the aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

Safety-phrases

- 2 Keep out of the reach of children.
- 23 Do not breathe fumes/aerosol.
- 29/56 Do not empty into the drains, dispose of this material and its container at hazardous or special waste collection point.
- 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent.
- 46 If swallowed seek medical advice immediately and show this container or label.

2.3 Other Hazards

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C (e. g. in the car). Do not pierce or burn, even after use. Do not spray on a naked flame or any



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 6 of 26

incandescent material. Keep away sources of ignition - No smoking. Keep out of reach of children. Build up of explosive mixtures possible without sufficient ventilation. Take precautionary measures against static discharges.

Article no. 45215, 45216, 45217: Contains 2-butanone oxime. May produce an allergic reaction.

Results of PBT and vPvB assessment: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Preparation based on synthetic resins, organic solvent and pigments.

3.1 Substance related information The product is a preparation.

Main component

-

INDEX No. -

EG No. -

CAS No. -

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: -

Classification according to Regulation (EC) 67/548: -

Hazard impurities

-

INDEX No. -

EG No. -

CAS No. -

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: -

Classification according to Regulation (EC) 67/548: -

(Danger designation: -)

3.2 Preparation/mixture related information



60 - 80 % 1-Methoxy-2-propanol¹

INDEX No. 603-064-00-3

EG No. 203-539-1

CAS No. 107-98-2

REACH Registration No.: 01-2119457435-35-XXXX

Classification according to Regulation (EC) 1272/2008:  Flam. Liq. 3 H226;  STOT SE 3 H336

Classification according to Regulation (EC) 67/548: R10, R67

(Danger designation: Flammable)

25 - 50 % Naphtha (petroleum), hydrodesulfurized heavy (Hydrocarbons, C9-C12, n-Alkanes, Isoalkanes, Cyclics, Aromates (2-25%))^{2, 3, 4, a, b}

INDEX No. 649-330-00-2



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 7 of 26

EG No. 265-185-4 (919-446-0²)

CAS No. 64742-82-1

REACH Registration No.: 01-2119458049-33-XXXX

Classification according to Regulation (EC) 1272/2008: Flam. Liq. 3 H226; Asp. Tox. 1 H304; STOT SE 3 H336; Aquatic Chron. 2 H411

Classification according to Regulation (EC) 67/548 or Regulation (EC) 1999/45: R10, Xn R65, R66, R67, N R51/53

(Danger designation: Flammable, Harmful, Dangerous for the environment)

10 - 25 % Xylene, mixture of isomer^{2,3,4}

INDEX No. 601-022-00-9

EG No. 215-535-7

CAS No. 1330-20-7

REACH-Registrierungsnr.: 01-2119486136-34-XXXX

Classification according to Regulation (EC) 1272/2008: Flam. Liq. 3 H226; Acute Tox. 4* H312; Skin Irrit. 2 H315; Acute Tox. 4* H332

Classification according to Regulation (EC) 67/548: R10, Xn R20/21, Xi R38
(Danger designation: Flammable, Harmful)

20 - 25 % Copper^{2,4}

INDEX No. -

EG No. 231-159-6

CAS No. 7440-50-8

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: Acute Tox. 4* H302; Aquatic Acute 1 H400; Aquatic Chronic 2 H411

Classification according to Regulation (EC) 67/548: Xn R22, N R50/53
(Danger designation: Harmful, Dangerous for the environment)

10 - 20 % Aluminium powder (stabilised)³

INDEX No. 013-002-00-1

EG No. 231-072-3

CAS No. 7429-90-5

REACH Registration No.: 01-2119529243-45-XXXX

Classification according to Regulation (EC) 1272/2008: Flam. Sol. 1 H228

Classification according to Regulation (EC) 67/548: F R11
(Danger designation: Highly flammable)

2,5 - 10 % Naphtha (petroleum), hydrotreated heavy Low boiling point hydrogen treated^{2,3,4}

INDEX No. 649-356-00-4

EG No. 265-199-0

CAS No. 64742-95-6

REACH Registration No.: 01-2119455851-35-XXXX



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 8 of 26

Classification according to Regulation (EC) 1272/2008: Flam. Liq. 3 H226; Asp. Tox. 1 H304; STOT SE 3 H335; STOT SE 3 H336; Aquatic Chron. 2 H411

Classification according to Regulation (EC) 67/548: R10, Xi R37, N R51/53 Xn R65, R66, R67

(Danger designation: Flammable, Harmful, Dangerous for the environment)

2,5 - 10 % Zinc²

INDEX No. 030-002-00-7, 030-001-01-9

EG No. 231-175-3

CAS No. 7440-66-6

REACH Registration No.: 01-2119467174-37-XXXX

Classification according to Regulation (EC) 1272/2008: Aquatic Acute 1 H400; Aquatic Chron. 1 H410

Classification according to Regulation (EC) 67/548: N R50/53

(Danger designation: Dangerous for the environment)

5 - 10 % Naphtha (petroleum), hydrotreated heavy Low boiling point hydrogen treat³

INDEX No. 649-327-00-6

EG No. 265-150-3

CAS No. 64742-48-9

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: Asp. Tox. 1 H304

Classification according to Regulation (EC) 67/548: Xn R65

(Danger designation: Harmful)

< 2,5 % Amine, C10-14-Alkyl, bis[2,4-dihydro-4-[(2-hydroxy-4-nitro-phenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)chromat(1-)]⁵

INDEX No. -

EG No. 285-082-8

CAS No. 85029-57-8

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: Aquatic Acute 1 H400; Aquatic Chron. 1 H410

Classification according to Regulation (EC) 67/548: N R50/53

(Danger designation: Dangerous for the environment)

< 2,5 % C.I. Solvent Orange 56⁶

INDEX No. -

EG No. -

CAS No. -

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: Aquatic Chron. 3 H412

Classification according to Regulation (EC) 67/548: R52/53

(Danger designation: -)



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 9 of 26

< 2,5 % Zinc oxide⁷

INDEX No. 030-013-00-7

EG No. 215-222-5

CAS No. 1314-13-2

REACH Registration No.: 01-2119463881-32-XXXX

Classification according to Regulation (EC) 1272/2008: Aquatic Acute 1 H400; Aquatic Chron. 1 H410

Classification according to Regulation (EC) 67/548: N R50/53
(**Danger designation:** Dangerous for the environment)

< 0,25 % 2-Methoxypropanol¹

INDEX No. 603-106-00-0

EG No. 216-455-5

CAS No. 1589-47-5

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008: Flam. Liq. 3 H226; Skin Irrit. 2 H315; Eye Dam. 1 H318; STOT SE 3 H335; Repr. 1B H360D

Classification according to Regulation (EC) 67/548: R10, T Repr. Cat. 2 R61, Xi R37/38, Xi R41

(**Danger designation:** Flammable, Toxic)

< 0,1 – 1,0 % 2-Butanone oxime^{2, 3, 4}

INDEX No. 616-014-00-0

EG No. 202-496-6

CAS No. 96-29-7

REACH Registration No.: 01-2119539477-28-XXXX

Classification according to Regulation (EC) 1272/2008: Acute Tox. 4 * H312; Skin Sens. 1 H317; Eye Dam. 1 H318; Carc. 2 H351

Classification according to Regulation (EC) 67/548: Carc. Cat. 3 R40, Xn R21, Xi R41, Xi R43

(**Danger designation:** Harmful)

¹ Contains in article no. 45201 - 45212, 45218, 45219, 45301, 45302, 45305 - 45307, 45311.

² Contains in article no. 45215.

³ Contains in article no. 45216.

⁴ Contains in article no. 45217.

⁵ Contains in article no. 45203.

⁶ Contains in article no. 45211, 45311.

⁷ Contains in article no. 45207, 45307, 45208.

*minimum classification

^a Note P according to VO 1272/2008 applies to this product or to one or several of its components. Benzene concentration < 0,1 Gew-%. Classification and labeling as carcinogene (R45) is not necessary.



Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (revised by Regulation (EC) No. 453/2010)

Transparent Glass Paint

Page 10 of 26

^b The above mentioned EC No. is a specific under-group of the CAS No. which is a reference for international inventories.

Additional information: Every entry in the EC No. column which begins with number "9" is – up to the publication of the official registration number – a temporary number declared by the ECHA for the substance.

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

4. FIRST AID MEASURES

4.1 General information

Remove contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. Immediately remove person concerned out of danger area. Symptoms see part 11.

After inhalation

Remove to fresh air, keep patient warm and at rest, if breathing is irregular or stopped, administer artificial respiration. If breathing is irregular or stopped, administer artificial respiration. Unconsciousness: lateral poison - contact a doctor immediately.

After skin contact

Remove contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do NOT use solvents or thinners. In case of skin reactions, consult a physician.

After eye contact

Remove contact lens. Irrigate copiously with clean, fresh water for at least 10 - 15 minutes, holding the eyelids apart and seek medical advice.

After ingestion

If swallowed immediately drink: water, to which activated charcoal may be added. Do NOT induce vomiting. During spontaneous vomiting hold the head of the casualty low with the body in a prone position in order to avoid aspiration. Call a physician to the site of the accident in every case.

4.2 The most important acute and delayed appearing symptoms and effects

Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. See part 11.

4.3 References to medical emergency relief or special treatment

With unconsciousness: inform an emergency doctor. Further instructions see section 4.1.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Extinguishing powder, foam, water spray and carbon dioxide.
Extinguishing media which must not be used for safety reasons: Full water jet



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 11 of 26

5.2 Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged

Use water spray jet to protect personnel and to cool endangered containers. Cool endangered containers with water in case of fire. It is possible to pressure formation and to burst of containers. Fire will produce dense black smoke. When product exposed to high temperatures it may produce hazardous decomposition products such as carbon monoxide and carbon dioxide, smoke and other hazards components.

5.3 Special protective equipment

In case of fire: Wear self-contained breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers. Beware of reignition. Do not allow the quenching water into the sewage system. Dispose fire debris and contaminated fire fighting water in accordance with official regulations.

5.4 Additional information

Compare section 3, 7, 8 and 10.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Wear protective gloves/protective clothing/eye protection/face protection. Remove ignition sources. Provide for sufficient ventilation. Do NOT inhale the vapour. Remove persons to safety.

6.2 Environmental precautions

Take up with a liquid absorbing material and proceed according to the waste disposal regulations. Do not empty into drains or watercourses. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations. Further instructions see section 6.3.

6.3 Methods for cleaning up/collecting

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent; avoid use of solvents. Further instructions see part 10.

6.4 Additional information

Further instructions see section 7, 8 and 10.

7. HANDLING AND STORAGE

7.1 Information for safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Provide adequate ventilation. Never use pressure to empty: container is not a pressure vessel. Do not leave vessels/containers open. Always keep in containers of same material as the original one. Additionally, the product should only be used in areas from which all-naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Preparation may



Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (revised by Regulation (EC) No. 453/2010)

Transparent Glass Paint

Page 12 of 26

charge electro statically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Use only antistatic equipped (spark-free) tools. Comply with the health and safety at work laws (TRGS 500). Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking should be prohibited in application area. See protective measures under point 8.

Precautions against fire and explosion

Flammable. Keep away from sources of ignition - No smoking. Danger of inflammation in cause of weldings-works at empty containers. Vapours may form explosive mixtures with air. Take precautionary measures against static discharges. Usual measures for fire prevention.

7.2 Conditions for safe storage, including incompatibilities

Information about storage conditions

Store between 5 and 30 °C in a dry, well-ventilated place away from sources of heat and direct sunlight. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Keep container tightly closed.

Hints on joint storage

Only substances of the same storage class should be stored together. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. The substance should not be stored with substances with which hazardous chemical reactions are possible.

Requirement for storage rooms and vessels

Store between 5 and 30 °C in a dry, well-ventilated place away from sources of heat and direct sunlight. No smoking. Keep container tightly closed. Containers, which are opened, must be carefully resealed and kept upright to prevent leakage. Although the storage and use of this product is not subject to specific statutory requirements, observation of the principles of the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations as appropriate will be seen as good industrial practice in meeting the general duties of the Health and Safety at Work Act. Observe label precautions.

Additional information

Storage class (VCI): 3A Flammable liquid substances

7.3 Specific uses

Transparent glass paints are ideal for painting on glass, acrylic glass, metal, wood and various plastics. For artists and hobby user.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Components with critical values that require monitoring at the workplace (exposure limits)

1-Methoxy-2-propanol; CAS No. 107-98-2

Specification: TRGS 900
Value: 100 ml/m³ (ppm) , 370 mg/m³
Peak limitation: 2 (I)



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 13 of 26

Toxic to reproduction: Y - a risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept
Remark: DFG, EU

Naphtha (petroleum), hydrodesulfurized heavy (Hydrocarbons, C9-C12, n-Alkanes, Isoalkanes, Cyclics, Aromates (2-25%)); CAS no. 64742-82-1

Specification: AGW
Value: short term exposure value: 600 ml/m³ (ppm)
long term exposure value: 300 ml/m³ (ppm)

Peak limitation: -
Toxic to reproduction: -
Remark: Calculated according to RCP method (TRGS 900).

Naphtha (petroleum), hydrotreated heavy Low boiling point hydrogen treated; CAS No. 64742-48-9

Specification: AGW
Value: 100 ml/m³ (ppm)
Peak limitation: -
Toxic to reproduction: -
Remark: Hydrocarbon mixture

Xylene, mixture of isomer; CAS No. 1330-20-7

Specification: AGW
Value: 100 ml/m³ (ppm), 440 mg/m³
Peak limitation: 2 (II)
Toxic to reproduction: Y - a risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept
Remark: DFG, H

Aluminium powder (stabilised); CAS No. 7429-90-5

Specification: AGW
Value: 3 A mg/m³, 10E mg/m³
Peak limitation: 2 (II)
Toxic to reproduction: -
Remark: With reference to the inhalable fraction.

Copper; CAS No. 7440-50-8

Specification: AGW
Value: 3 A mg/m³, 1 E mg/m³
Peak limitation: 2 (II)
Toxic to reproduction: -
Remark: With reference to the inhalable fraction.

Naphtha (petroleum), hydrotreated heavy Low boiling point hydrogen treated; CAS No. 64742-95-6

Specification: AGW
Value: 100 ml/m³ (ppm)
Peak limitation: -



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 14 of 26

Toxic to reproduction: -
Remark: Hydrocarbon mixture

Zinc oxide; CAS No. 1314-13-2

Specification: AGW
Value: 3 A mg/m³, 10E mg/m³
Peak limitation: 2 (II)
Toxic to reproduction: -
Remark: With reference to the inhalable fraction.

2-Methoxypropanol; CAS No. 1589-47-5

Specification: AGW
Value: 5 ml/m³ (ppm), 19 mg/m³
Peak limitation: 8 (II)
Toxic to reproduction: Z
Remark: DFG, H

DNEL/DMEL-Values

Naphtha (petroleum), hydrodesulfurized heavy (Hydrocarbons, C9-C12, n-Alkanes, Isoalkanes, Cyclics, Aromates (2-25%)); CAS No. 64742-82-1

Oral	DNEL long-term exposure – systemic effects	26 mg/kg	(general population)
Dermal	DNEL long-term exposure – systemic effects	26 mg/kg bw/d	(general population)
		44 mg/kg bw/d	(worker)
Inhalativ	DNEL long-term exposure – systemic effects	71 mg/m ³	(general population)
		330 mg/m ³	(worker)

Naphtha (petroleum), hydrotreated heavy Low boiling point hydrogen treated; CAS No. 64742-95-6

Oral	DNEL long-term exposure – systemic effects	11 mg/kg	(general population)
Dermal	DNEL long-term exposure – systemic effects	11 mg/kg bw/d	(general population)
Inhalativ	DNEL long-term exposure – systemic effects	32 mg/m ³	(general population)

Copper, CAS No. 7440-50-8

Oral	DNEL long-term exposure – systemic effects	0,16 mg/kg bw/d	(general population)
Dermal	DNEL long-term exposure – systemic effects	137 mg/kg bw/d	(general population)
		137 mg/kg bw/d	(worker)
Dermal	DNEL short-term exposure – systemic effects	273 mg/kg bw/d	(general population)
		273 mg/kg bw/d	(worker)
Inhalativ	DNEL long-term exposure – systemic effects	18,2 mg/m ³	(general population)
		18,2 mg/m ³	(worker)

Zinc, CAS No. 7440-66-6

Oral	DNEL long-term exposure – systemic effects	0,83 mg/kg bw/d	(general population)
Dermal	DNEL long-term exposure – systemic effects	83 mg/kg bw/d	(general population)
		83 mg/kg bw/d	(worker)
Inhalativ	DNEL long-term exposure – systemic effects	2,5 mg/m ³	(general population)
		5 mg/m ³	(worker)



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 15 of 26

Xylene, mixture of isomer; CAS No. 1330-20-7

Oral	DNEL long-term exposure – systemic effects	1,6 mg/kg bw/d	(general population)
Dermal	DNEL long-term exposure – systemic effects	108 mg/kg bw/d	(general population)
		180 mg/kg bw/d	(worker)
Inhalativ	DNEL short-term exposure – local effects	174 mg/m ³	(general population)
		289 mg/m ³	(worker)
Inhalativ	DNEL short-term exposure – systemic effects	174 mg/m ³	(general population)
		289 mg/m ³	(worker)
Inhalativ	DNEL long-term exposure – systemic effects	14,8 mg/m ³	(general population)
		77 mg/m ³	(worker)

PNEC-Values

Copper, CAS No. 7440-50-8

STP	0,230 mg/l	(environmental)
freshwater	0,0078 mg/l	(environmental)
marine water	0,0052 mg/l	(environmental)
sediment estuarine	288 mg/kg dry weight	(environmental)
sediment freshwater	87 mg/kg dry weight	(environmental)
sediment marine	676 mg/kg dry weight	(environmental)
soil	65 mg/kg dry weight	(environmental)

Zinc, CAS No. 7440-66-6

STP	0,0052 mg/l	(environmental)
freshwater	0,0206 mg/l	(environmental)
marine water	0,0061 mg/l	(environmental)
sediment freshwater	87 mg/kg dry weight	(environmental)
sediment marine	56,5 mg/kg dry weight	(environmental)
soil	35,6 mg/kg dry weight	(environmental)

Xylene, mixture of isomer; CAS No. 1330-20-7

STP	6,58 mg/l	(environmental)
freshwater	0,327 mg/l	(environmental)
marine water	0,327 mg/l	(environmental)
sediment freshwater	12,46 mg/kg dry weight	(environmental)
sediment marine	12,46 mg/kg dry weight	(environmental)
soil	2,31 mg/kg dry weight	(environmental)

8.2 Occupational exposure controls

Technical measures and the application of suitable working methods have precedence before the application of personal protective equipment. Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn. Suitable judgement methods of the examination of the effectiveness of the grievd preventive measures enclose measuring-technical and non-technical inquiry methods like they in the technical rules for danger materials (TRGS) 402.



Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (revised by Regulation (EC) No. 453/2010)

Transparent Glass Paint

Page 16 of 26

Personal protective equipment

Do not eat or drink during work – No smoking. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately.

Respiratory protection

Take breathing protection measures (see also instruct to avoid accidents). Breathing protection equipment required in inadequately ventilated places and during spraying.

Respiratory filter (gas): A1 (brown) until 1000 ml/m³ (ppm)

A2 (brown) until 5000 ml/m³ (ppm)

A3 (brown) until 10000 ml/m³ (ppm)

Details are to be inferred “from the rules for the use of respiratory protective devices” (BGR 190 (German regulation)).

Skin protection

Avoid contact with skin. Use protective gloves conform EN 374. Solvent-resistant protective gloves must be worn. The glove material must be sufficiently impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location. Textile or leather gloves are completely unsuitable. Following materials are unsuitable for protective gloves because of degradation, severe swelling or low permeation time: Natural rubber/Natural latex - NR, Polychloroprene - CR, Butyl rubber - Butyl, Polyvinyl chloride - PVC. Pay attention to skin care.

The following materials are suitable for protective gloves

Inherent protection

Nitrile rubber/Nitrile latex - NBR (0,38 mm): Permeation time 256 minute

Splash guard

Nitrile rubber/Nitrile latex - NBR (0,12 mm): Permeation time 12 minute

The times listed are suggested by measurements taken at 22 °C and constant contact. Temperatures raised by warmed substances, body heat, etc. and a weakening of the effective layer thickness caused by expansion can lead to a significantly shorter breakthrough time. In case of doubt contact the gloves' manufacturer. A 1.5-times increase / decrease in the layer thickness doubles / halves the breakthrough time. This data only applies to the pure substance. Transferred to mixtures of substances, these figures should only be taken as an aid to orientation.

Eye protection

Avoid contact with eyes. Use safety glasses according to EN 166:2001.

Body protection

Personnel should wear antistatic clothing's made of natural fibre or of high temperature resistant synthetic fibre. All parts of the body should be washed after contact. Light protective clothing.

Limitation and supervision of the environmental exposition

See section 6 and 7.



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 17 of 26

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Form: fluid
Colour: refer to label
Odour: characteristic

9.2 Relevant safety data

Article no. 45201 - 45212, 45218, 45219, 45301, 45302, 45305, 45306:

Flashpoint: 23 - 30 °C DIN EN 22719

Viscosity: > 30 s ISO 2431

Density: (20 °C) 0,94 - 1,1 g/cm³ DIN 53217

Explosive limits:

Lower / Upper: 0,8 Vol.-% / 13,7 Vol.-%

Ignition temperature: 287

Vapour pressure: not determined

pH-value: not applicable

Solubility in water: insoluble

Article no. 45215, 45216, 45217:

Flashpoint: 30 °C DIN EN 22719

Viscosity: > 30 s ISO 2431

Density: (20 °C) 1 - 1,15 g/cm³ DIN 53217

Explosive limits:

Lower / Upper: 1,1 Vol.-% / 7 Vol.-%

Ignition temperature: not determined

Vapour pressure: 6,7 hPa

pH-value: not applicable

Solubility in water: insoluble

9.3 Additional information

No other physical-chemical data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. See section 7.

10.2 Chemical stability

If handled properly then product has chemical stability.

10.3 Possible dangerous reactions

None, if handled according to order. Further instructions see section 10.1 and 10.2.

10.4 Conditions to avoid

Only use the material in places where open light, fire and other flammable sources can be kept



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 18 of 26

away.

10.5 Incompatible materials

See section 10.1.

10.6 Hazardous decomposition products

When product exposed to high temperatures, it may produce hazardous decomposition products such as carbon monoxide and carbon dioxide, smoke and other hazardous components.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

1-Methoxy-2-propanol; CAS No. 107-98-2

LD₅₀, oral, rat > 5000 mg/kg (Supplier's information.)

LD₅₀, dermal, rabbit = 13000 mg/kg (Supplier's information.)

Remark: Substance/product listed in Regulation (EC) 1272/2008.

Naphtha (petroleum), hydrodesulfurized heavy (Hydrocarbons, C₉-C₁₂, n-Alkanes, Isoalkanes, Cyclics, Aromates (2-25%)); CAS No. 64742-82-1

LD₅₀, oral, rat > 15000 mg/kg (OECD 401)

LD₅₀, dermal, rat = 3400 mg/kg (OECD 402)

LC₅₀, inh., rat, 4h = 13100 mg/m³ (OECD 403)

Remark: Substance/product listed in Regulation (EC) 1272/2008.

Naphtha (petroleum), hydrotreated heavy Low boiling point hydrogen treated (Hydrocarbons, C₁₀-C₁₃, n-Alkanes, Isoalkanes, Cyclics, Aromates < 2%); CAS No. 64742-48-9

LD₅₀, oral, rat > 8000mg/kg (Supplier's information.)

LD₅₀, dermal, rabbit > 4000 mg/kg (Supplier's information.)

LC₅₀, inh., rat, 4h > 5,4mg/l (Supplier's information.)

Remark: Substance/product listed in Regulation (EC) 1272/2008.

2-Butanone oxime; CAS No. 96-29-7

LD₅₀, oral, rat = 930 mg/kg (Reference: Office of Toxic Substances Report. Vol. OTS.)

LD₅₀, dermal, rabbit = 185 mg/kg (Reference: National Technical Information Service. Vol. OTS0529835.)

Remark: Substance/product listed in Regulation (EC) 1272/2008.

Xylene, mixture of isomer; CAS No. 1330-20-7

LD₅₀, oral, rat = 4300 mg/kg (Reference: AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956.)

LD₅₀, dermal, rabbit > 1700 mg/kg (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974.)

LC₅₀, inh., rat, 4h = 21,7 mg/l (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974.)



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 19 of 26

Remark:	Substance/product listed in Regulation (EC) 1272/2008.
Primary irritant effect after inhalation	Exposure to component solvents vapour concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane, respiratory system irritation and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
on the skin	Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin and absorption through the skin. <u>Article no. 45215, 45216, 45217</u> : Causes skin irritation. Contains 2-butanone oxime. May produce an allergic reaction.
on the eyes after ingestion	The liquid splashed in the eyes may cause irritation. May cause lung damage if swallowed. Do not induce vomiting. For symptoms see primary irritant effect after inhalation.
Sensitization Chronic	There are no data available on the preparation itself. There are no data available on the preparation itself.

11.2 Additional toxicological information

The product is classified according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Article no. 45203, 45207, 45307, 45208: Harmful to aquatic life with long lasting effects.

Article no. 45216: Toxic to aquatic life with long lasting effects.

Article no. 45215 - 45217: Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Naphtha (petroleum), hydrodesulfurized heavy (Hydrocarbons, C9-C12, n-Alkanes, Isoalkanes, Cyclics, Aromates (2-25%)); CAS No. 64742-82-1

LC_{50, fish, 96h} = 10 - 30 mg/l (OECD 203)

EC_{50, crustaceans, 48h} = 10 - 22 mg/l OECD 202)

Remark: -

Xylene, mixture of isomer; CAS No. 1330-20-7

LC_{50, fish, 96h} = 15,7 mg/l (Reference: Tatem, H.E., B.A. Cox, and J.W. Anderson 1978. The Toxicity of Oils and Petroleum Hydrocarbons to Estuarine Crustaceans. Estuar.Coast.Mar.Sci. 6(4):365-373; Tatem, H.E. 1975.)

LC_{50, crustaceans, 48h} = 8,5 mg/l (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974.)

Remark: -



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 20 of 26

2-Butanone oxime; CAS No. 96-29-7

LC_{50, fish, 96h} = 843 mg/l (Reference: Brooke, L.T., D.J. Call, D.L. Geiger, and C.E. Northcott 1984. Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*), Vol. 1. Center for Lake Superior Environmental Stud., Univ.of Wisconsin-Superior, Superior, WI :414.)

Remark: -

Copper, CAS No. 7440-50-8

LC_{50, fish, 96h} = 0,665 mg/l (Reference: Shariff, M., P.A.H.L. Jayawardena, F.M. Yusoff, and R. Subasinghe 2001. Immunological Parameters of Javanese Carp *Puntius gonionotus* (Bleeker) Exposed to Copper and Challenged with *Aeromonas hydrophila*. *Fish Shellfish Immunol.* 11(4):281-291; Rehwoldt, R., L.W. Menapace, B. Nerrie, and D. Alessandrello 1972. The Effect of Increased Temperature upon the Acute Toxicity of Some Heavy Metal Ions. *Bull. Environ. Contam. Toxicol.* 8(2):91-96.)

LC_{50, crustaceans, 48h} = 0,044 mg/l (Reference: Lazorchak, J.M. 1987. The Significance of Weight Loss of *Daphnia magna* Straus During Acute Toxicity Tests with Copper. Ph.D Thesis, Univ.of Texas, Dallas, TX :191 p.)

EC_{50, crustaceans, 48h} = 0,02 mg/l (Reference: Bossuyt, B.T.A., B.T.A. Muysen, and C.R. Janssen 2005. Relevance of Generic and Site-Specific Species Sensitivity Distributions in the Current Risk Assessment Procedures for Copper and Zinc. *Environ. Toxicol. Chem.* 24(2):470-478.)

EC_{50, algae, 72h} = 0,57 mg/l (Reference: Peterson, S.M., and J.L. Stauber 1996. new Algal Enzyme Bioassay for the Rapid Assessment of Aquatic Toxicity. *Bull. Environ. Toxicol. Chem.* 56(5):750-757.)

EC_{50, algae, 96h} = 7,9 mg/l (Reference: Gatidou, G., and N.S. Thomaidis 2007. Evaluation of Single and Joint Toxic Effects of Two Antifouling Biocides, Their Main Metabolites and Copper Using Phytoplankton Bioassays. *Aquat. Toxicol.* 85(3):184-191.)

Remark: -

Zinc, CAS No. 7440-66-6

LC_{50, fish, 96h} = 1120 mg/l (Reference: Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.; Gale, N.L., B.G. Wixson, and M. Erten 1992. An Evaluation of the Acute Toxicity of Lead, Zinc, and Cadmium in Missouri Ozark Groundwater. *Trace Subst. Environ. Health* 25:169-183.)

LC_{50, crustaceans, 48h} = 12,3 mg/l (Reference: Gale, N.L., B.G. Wixson, and M. Erten 1992. An Evaluation of the Acute Toxicity of Lead, Zinc, and Cadmium in Missouri Ozark Groundwater. *Trace Subst. Environ. Health* 25:169-183.)

Remark: -

12.2 Persistence/degradability

There are no data available.



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 21 of 26

12.3 Bioaccumulative potential

There are no data available.

12.4 Mobility

There are no data available.

12.5 Results of PBT and vPvP assessment

There are no data available.

12.6 Other adverse effects

There are no data available.

12.7 Further ecological information

Do not discharge into the drains/surface waters/groundwater.

Water hazard class:

Article no. 45201, 45202, 45204 - 45206, 45219, 45301, 45302, 45305 – 45306 45311: WGK = 1
slightly hazardous to water

Article no. 45203, 45207, 45307, 45208, 45215, 45216, 45217: WGK = 2 hazardous for water

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Send to a hazardous waste incinerator facility under observation of official regulations. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Recommendation

Disposal must be made according to official regulations.

13.2 European waste code number in accordance with AAV

EWC No.: 08 01 11 waste paint and varnish containing organic solvents or other dangerous
EWC No.: 20 01 27 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR
COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES)
INCLUDING SEPARATELY COLLECTED FRACTIONS, solvents

13.3 Packaging

Contaminated packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing, may be taken for reuse. Packaging that cannot be cleaned should be disposed in the same manner as the medium.

EWC No. 15 01 10 packaging containing residues of or contaminated by dangerous substances

Non-contaminated packages

EWC No.: 15 01 02 plastic packaging

EWC No.: 15 01 07 glass packaging



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 22 of 26

14. TRANSPORT INFORMATION

14.1 Land transport ADR/RID and GVS/GGVE

Article no. 45201 – 45203, 45204- 45206, 45207 – 45219, 45301, 45302, 45305 – 45307, 45311:



Class: 3
Kemler-Code: 30
UN No.: 1263
Packaging group: III
Label: 3
Special marking: -
Proper shipping name: 1263 – Paint (Contains 1-Methoxy-2-propanol.)
Classification-Code: F1
Limit: 5 L
Tunnel restriction code: 3 (D/E)

Article no. 45215, 45216, 45217:



Class: 3
Kemler-Code: 30
UN No.: 1263
Packaging group: III
Label: 3
Special marking: Symbol (fish and tree)
Proper shipping name: 1263 - Paint (Contains Naphtha (petroleum) hydrodesulfurized heavy.)
Classification-Code: F1
Limit: 5 L
Tunnel restriction code: 3 (D/E)

14.2 Maritime transport IMDG/GGVSea

Article no. 45201 – 45203, 45204- 45206, 45207 – 45219, 45301, 45302, 45305 – 45307, 45311:



Class: 3
UN No.: 1263
Label: 3
Packaging group: III
EmS-No.: F-E, S-E
Marine pollutant: no
Proper shipping name: Paint (Contains 1-methoxy-2-propanol.)



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 23 of 26

Article no. 45215, 45216, 45217:



Class: 3
UN No.: 1263
Label: 3
Packaging group: III
EmS-No.: F-E, S-E
Marine pollutant: yes
Proper shipping name: Paint (Contains 1-methoxy-2-propanol.)

14.3 Air transport ICAO-TI and IATA-DGR

Article no. 45201 – 45203, 45204- 45206, 45207 – 45219, 45301, 45302, 45305 – 45307, 45311:



ICAO/IATA Class: 3
UN no.: 1263
Label: 3
Packaging group: III
Proper shipping name: Paint (Contains 1-methoxy-2-propanol.)

Art.-Nr. 45215, 45216, 45217:



ICAO/IATA Class: 3
UN no.: 1263
Label: 3
Packaging group: III
Proper shipping name: Paint (Contains Naphtha (petroleum) hydrodesulfurized heavy.)

14.4 Remarks

Product contains environmentally hazardous substances: Article no. 45215, 45216, 45217:
Naphtha (petroleum) hydrodesulfurized heavy.

15. REGULATORY INFORMATION

#

15.1 European Regulation

Chemical Safety Assessment: For this substance a chemical safety assessment is not required.

15.2 National Regulations

Statutory order on hazardous incidents (StörfallV): Annex I, Nr. 6, 9b
Regulation on inflammable liquids: VbF-Class: All



Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (revised by Regulation (EC) No. 453/2010)

Transparent Glass Paint

Page 24 of 26

Emission control act ("TA-Luft"): 3.1.7 Class III

Water hazard class:

Article no. 45201, 45202, 45204 - 45206, 45219, 45301, 45302, 45305 - 45306 45311: WGK = 1
slightly hazardous to water

Article no. 45203, 45207, 45307, 45208, 45215, 45216, 45217: WGK = 2 hazardous for water

15.3 Additional information

The product is classified according to the EEC directives and the Ordinance on Hazardous Materials (GefStoffV).

If bottle \leq 125 ml then the following H- and P-phrases are not necessary: H226, H315, H400, H411, P210, P271, P280, P302+350, P370+378, P403+233, P501.

Please check local regulations.

Volatile organic compounds (Swiss):

Article no. 45201, 45202, 45204 - 45206, 45209 - 45219, 45301, 45302, 45305 - 45306, 45311:

20 ml: 70,34 - 87,85 %, 0,763 - 0,894 kg/l, 14,49 - 16,85 g/20ml

50 ml: 70,34 - 87,19 %, 0,763 - 0,829 kg/l, 38,16 - 41,46 g/50ml

Article no. 45207, 45307, 45208: 40,55 %, 0,406 - 0,467 kg/l, 8,11 - 9,33 g/20ml

The advertised use (section 1) is not subject of the Directive 2004/42/EC.

16. OTHER INFORMATION

16.1 Changes compared with the last version

The last version was all changed and revised completely. Alterations to the previous edition are marked in the right-hand margin.

16.2 Literature reference and data source

Regulation (EC) 1999/45, last changed by Regulation (EC) 1907/2006

Regulation (EC) 67/548, last changed by Regulation (EC) 2009/2

REACH Regulation (EC) 1907/2006, last changed by Regulation (EC) 453/2010

Regulation (EC) 1272/2008, last changed by Regulation (EC) 790/2009

Internet

<http://www.baua.de>

<http://www.arbeitsicherheit.de>

<http://www.gischem.de>

16.3 Full text of H- and R-phrases appearing in section 2 and 3:

According to Regulation (EC) 1272/2008

Flam. Liq. 3 H226	Flammable liquid and vapour.
Flam. Sol. 1 H228	Flammable solid.
Acute Tox.4 H302	Harmful if swallowed.
Asp. Tox.1 H304	May be fatal if swallowed and enters airways.
Acute Tox. 4* H312	Harmful in contact with skin.
Skin Irrit. 2 H315	Causes skin irritation.
Skin Sens. 1 H317	May cause an allergic skin reaction.
Eye Dam. 1 H318	Causes serious eye damage.



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 25 of 26

Acute Tox. 4* H 332	Harmful if inhaled.
STOT SE 3 H335	May cause respiratory irritation.
STOT SE 3 H336	May cause drowsiness or dizziness.
Carc. 2 H351	Suspected of causing cancer.
Repr. 1B H360D	May damage the unborn child.
Aquatic Acute 1 H400	Very toxic to aquatic life.
Aquatic Chron. 1 H410	Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2 H411	Toxic to aquatic life with long lasting effects.
Aquatic Chron. 3 H412	Harmful to aquatic life with long lasting effects.

* minimum classification

EUH – statements

-

Classification according to Regulation (EC) 67/548 or Regulation (EC) 1999/45:

10	Flammable.
11	Highly flammable.
21	Harmful in contact with skin.
22	Harmful if swallow.
20/21	Harmful by inhalation and in contact with skin.
37	Irritating to respiratory system.
38	Irritating to skin.
37/38	Irritating to respiratory system and skin.
40	Limited evidence of a carcinogenic effect.
41	Risk of serious damage to eyes.
43	May cause sensitisation by skin contact.
50	Very toxic to aquatic organisms.
50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
61	May cause harm to the unborn child.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

Methods according to article 9 of the order (EC) No. 1272/2008 for the assessment of the information for the purpose of the classification were used:

Classification according to Regulation (EC) 1272/2008, Annex VII (conversion table)

16.4 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)



**Material Safety Data Sheet according to Regulation (EC) No. 1907/2006
(revised by Regulation (EC) No. 453/2010)**

Transparent Glass Paint

Page 26 of 26

BlmSchV:	Order for the realisation of the Federal Immission Protection Law
CAS:	C hemical A bstracts S ervice
DIN:	Norm of the German institute of standardization
EC:	Effective concentration
EC50:	Effective concentration, 50 percent
EG:	European Community
EINECS:	European Inventory of Existing Commercial Chemical Substances
EN:	European Standard
GefStoffV:	Ordinance on Hazardous Substances, Germany
GHS:	G lobally H armonized S ystem of Classification and Labelling of Chemicals
IATA:	I nternational A ir T ransport A ssociation
IMDG:	I nternational M aritime C ode for D angerous G oods
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
Log K_{ow}:	n-octanol-water partition coefficient
OECD:	O rganisation for E conomic C o-operation and D evelopment
PBT:	Persistent, bioaccumulateable, toxically
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
TRGS:	Technical rules for danger materials
UN:	U nited N ations (Vereinte Nationen)
VOC:	V olatile O rganic C ompounds
vPvB:	very much persistent and very bioaccumulateable
VwVwS:	Administrative regulation of hazardous to waters materials
WGK:	Water hazardous class

16.5 Department issuing safety data sheet

Laboratory, Mrs. Dipl.-Ing. Treiber, b.treiber@c-kreul.de.

16.6 Additional information

The data is based on our present knowledge. The data correspond to the national and EEC legislation. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

It is not permitted to use the product for any other application mentioned in chapter 1 except with a written permission. The user is responsible for the compliance with all valid legal regulation.

This safety data sheet is only valid for Transparent Glass Paint. It's not valid for other products placed in the according sales displays or sets.