

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

C. KREUL Gel roller

Page 1 of 12

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

1.1 Identification of the substance/preparation

Trade name C. KREUL Gel roller
Article No. 48301 – 48305, 48310, 48312, 48320, 48321, 48330 - 48332 / 48340,
48341 / 483072 / 48395
Package size pen / 12 pens, 6 pens / 72 pens / 95 pens
Substance name -
INDEX No. -
EG No. -
CAS No. -
REACH Registration No. -

1.2 Use of the substance/preparation

Universal pen to use on paper.

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 - Thursday 8.00 - 17.00; Friday 8.00 - 15.00)

2. HAZARD IDENTIFICATION

2.1 Classification of the substance/preparation

Classification according to Regulation (EC) 1272/2008

According to Regulation (EC) 1272/2008 the product will be classified 2015 at the earliest.

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

The product is not classified as hazardous according to Regulation (EC) 67/548 or Regulation (EC) 1999/45.

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

Labelling according to Regulation (EC) 1272/2008

According to Regulation (EC) 1272/2008 the product will be classified 2015 at the earliest.

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

C. KREUL Gel roller

Page 2 of 12

Hazard pictogram and signal word of the product

-

Hazard-determining components of labelling

-

Hazard statements

-

European hazard statements

EUH -

Precautionary statements

-

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

The product is not classified as hazardous according to Regulation (EC) 67/548 or Regulation (EC) 1999/45.

Danger symbol and danger designation of the product

-

Hazard-determining components of labelling

-

Risk-phrases

-

Safety-phrases

-

2.3 Other Hazards

None.

Results of PBT and vPvB assessment: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Aqueous preparation with pigments.

3.1 Substance related information

Main component

The product is a preparation.

-

INDEX No. -

EG No. -

CAS No. -

REACH Registration No.: -

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

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

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

C. KREUL Gel roller

Page 3 of 12

(Danger designation: -)

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


2,5 - 20 % Diethylene glycol


INDEX No. 603-140-00-6

EG No. 203-872-2

CAS No. 111-46-6

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008:  Acute Tox. 4* H302

Classification according to Regulation (EC) 67/548:  Xn R22

(Danger designation: Harmful)

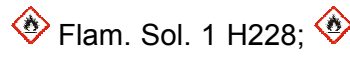
2,5 - 10 % Aluminium powder (stabilised)

INDEX No. 013-002-00-1

EG No. 231-072-3

CAS No. 7429-90-5

REACH Registration No.: -

Classification according to Regulation (EC) 1272/2008:  Flam. Sol. 1 H228;  Water-react. 2 H261

Classification according to Regulation (EC) 67/548: :  F R11, R15

(Danger designation: Highly flammable)

* minimum classification

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

4. FIRST AID MEASURES

4.1 General information

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

After inhalation

Remove to fresh air, keep patient warm and at rest. In case of unwellness, seek medical advice (show directions for use or safety data sheet if possible).

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

C. KREUL Gel roller

Page 4 of 12

After skin contact

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

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. Do NOT induce vomiting. In case of unwellness, seek medical advice (show directions for use or safety data sheet if possible). During spontaneous vomiting hold the head of the casualty low with the body in a prone position in order to avoid aspiration.

4.2 The most important acute and delayed appearing symptoms and effects

No known symptoms to date. See part 11.

4.3 References to medical emergency relief or special treatment

Further instructions see section 4.1

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Foam, water spray and carbon dioxide.

Extinguishing media which must not be used for safety reasons: Full water jet.

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

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. 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

Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Large quantities of ink: Remove persons to safety. Take up with a liquid absorbing material and proceed according to the waste disposal regulations. Do not empty into drains or watercourses. If

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

C. KREUL Gel roller

Page 5 of 12

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

Large quantities of ink: 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

Avoid eye and skin 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

No special measures necessary. Product itself does not burn. Further instructions see 7.1.

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. Protect against: frost.

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. Keep container tightly closed. Observe label precautions.

Additional information

Storage class (VCI): Ink: 12 Non-Combustible liquids. Pen: 11 Combustible solids.

7.3 Specific uses

Universal pen to use on paper.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Diethylene glycol; CAS No. 111-46-6

Specification: AGW

Value: 10 ml/m³ (ppm), 44 mg/m³

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

C. KREUL Gel roller

Page 6 of 12

Peak limitation: 4 (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

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

Specification: AGW
Value: 10 mg/m³
Peak limitation: 4 (II)
Toxic to reproduction: -
Remark: General threshold limit value for dust – inhalable fraction

DNEL/DMEL-Values

No data available.

PNEC-Values

No data available.

8.2 Occupational exposure controls

Technical measures and the application of suitable working methods have precedence before the application of personal protective equipment. Suitable judgement methods of the examination of the effectiveness of the grievied preventive measures enclose measuring-technical and non-technical inquiry methods like they in the technical rules for danger materials (TRGS) 402.

Personal protective equipment

Do not eat or drink during work. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Avoid contact with eyes. Remove soiled or soaked clothing immediately.

Respiratory protection

Provide good ventilation when handling large quantities.

Skin protection

Avoid contact with skin. Use rubber gloves according to EN 374.

Eye protection

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

Body protection

No special measures necessary.

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)

C. KREUL Gel roller

Page 7 of 12

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Form: fluid
Colour: refer to label
Odour: characteristic

9.2 Relevant safety data

Flashpoint: not determined
Viscosity: not determined ISO 2431
Density: (20 °C) 1,0 – 1,2 DIN 53217
Explosive limits:
Lower / Upper: not applicable
Ignition temperature: not applicable
Vapour pressure: not determined
pH-value: 6 - 9
Solubility in water: miscible

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

Keep cool. Protect from sunlight.

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 (caustic fumes).

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

C. KREUL Gel roller

Page 8 of 12

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Diethylene glycol, CAS No. 111-46-6

LD_{50, oral, rat} = 12600 mg/kg (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 25, 1974.)

LD_{50, dermal, rabbit} = 11900 mg/kg (Reference: Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 25, 1974.)

Remark: Substance/product is not listed in Regulation (EC) 1272/2008.

Primary irritant effect

**after inhalation
on the skin**

There are no data available on the preparation itself.
Frequent contact can lead to skin irritation, especially if product is allowed to dry out.

on the eyes

The liquid splashed in the eyes may cause irritation and reversible damage.

after ingestion

There are no data available on the preparation itself.

Sensitization

No sensitizing effects know.

Chronic

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

Diethylene glycol, CAS No. 111-46-6

LC_{50, fish, 96h} = 75200 mg/l (Reference: Geiger, D.L., L.T. Brooke, and D.J. Call 1990. Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*), Volume 5. Ctr.for Lake Superior Environ.Stud., Univ.of Wisconsin-Superior, Superior, WI :332 p.)

Remark: -

12.2 Persistence/degradability

There are no data available.

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.

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

C. KREUL Gel roller

Page 9 of 12

12.6 Other adverse effects

There are no data available.

12.7 Further ecological information

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

WGK 1 slightly hazardous to water (according VwVwS)

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 12 waste paint and varnish other than those mentioned in 08 01 11

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.

Non-contaminated packages

EWC No.: 15 01 02 plastic packaging

14. TRANSPORT INFORMATION

14.1 Land transport ADR/RID and GVS/GGVE

Not classified as hazardous.

Class: -
Kemler-Code: -
UN No.: -
Packaging group: -
Label: -
Special marking: -
Proper shipping name: -
Classification-Code: -
Limit: -
Tunnel restriction code: -

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

C. KREUL Gel roller

Page 10 of 12

14.2 Maritime transport IMDG/GGVSea

Not classified as hazardous.

Class: -
UN No.: -
Label: -
Packaging group: -
EmS-No.: -
Marine pollutant: -
Proper shipping name: -

14.3 Air transport ICAO-TI and IATA-DGR

Not classified as hazardous.

ICAO/IATA Class: -
UN no.: -
Label: -
Packaging group: -
Proper shipping name: -

14.4 Remarks

Product contains environmentally hazardous substances: -.

15. REGULATORY INFORMATION

15.1 European Regulation

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

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

The product is not classified as hazardous according to Regulation (EC) 67/548 or Regulation (EC) 1999/45.

Danger symbol and danger designation of the product

-

Risk-phrases

-

Safety-phrases

-

Hazard-determining components of labelling

-

15.2 National Regulations

Statutory order on hazardous incidents (StörfallV): -

Regulation on inflammable liquids: VbF-Class: -

Emission control act ("TA-Luft"): -

Water hazard class: WGK 1 slightly hazardous to water (according VwVwS)

15.3 Additional information

Labelling according to Regulation (EC) 1272/2008: According to Regulation (EC) 1272/2008 the product will be classified 2015 at the earliest.

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

C. KREUL Gel roller

Page 11 of 12

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

If bottle \leq 125 ml then the following R- and S-phrases are not necessary: -

Please check local regulations.

Volatile organic compounds (Swiss): < 3 %.

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.arbeitssicherheit.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. Sol. 1 H228 Flammable solid.

Water-react. 2 H261 In contact with water releases flammable gases.

Acute Tox. 4* H302 Harmful if swallowed.

EUH – statements

-

* minimum classification

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

11 Highly flammable.

15 Contact with water liberates extremely flammable gases.

22 Harmful if swallowed

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 67/548/EC and 1999/45/EC.

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)

BImSchV: Order for the realisation of the Federal Immission Protection Law

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

C. KREUL Gel roller

Page 12 of 12

CAS:	Chemical Abstracts Service
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:	Globally Harmonized System of Classification and Labelling of Chemicals
IATA:	International Air Transport Association
IMDG:	International Maritime Code for Dangerous Goods
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
Log K_{ow}:	n-octanol-water partition coefficient
OECD:	Organisation for Economic Co-operation and Development
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:	United Nations (Vereinte Nationen)
VOC:	Volatile Organic Compounds
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 C. KREUL Gel roller. It's not valid for other products placed in the according sales displays or sets.