

**Material Safety Data Sheet according to the Regulat.
 1907/2006/EC(Annex II)**

Revision Date: 11.2008

Date: 1. December 2008

1. Product details:

1.1 Recommended use: Retarder „Cellofrisch“
 Customs-tariff-no.: 2710 1929

1.2 Identification of the manufacturer / supplier

B. GRAUEL GmbH
 Reuchlinstraße 10-11, Bldg. A/2nd Floor
 D-10553 Berlin (Federal Republic of Germany)
 Phone.: +49 30 34 99 37 – 0
 Fax: +49 30 34 99 37 – 22
 Emergency phone: +49 30 34 99 37 – 0
 Product safety: Phone: +49 30 34 99 37 – 16
 E-Mail: grauel @grauel.de

2 Hazards identification

Hazard designation:

Xn Harmful

Information pertaining to particular dangers for man and environment

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
 At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

R 65 Harmful: may cause lung damage if swallowed.
 R 66 Repeated exposure may cause skin dryness or cracking.

3 Composition/information on ingredients

Chemical characterization

Description:

Preparation of aluminium pigments, resins, vegetable oil, mineral oil and additives.

Hazardous ingredients:

EINECS-No.	Name	Symb.	Conc.-%
CAS-No.	R-phrases		
	Mineral oils 65-66	Xn	80-100
68526-86-3	ISOTRIDECYLALKOHOL 50	N	5-10

Additional information: For the wording of the listed risk phrases refer to section 16.



4 First aid measures

General information: In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

After inhalation: Remove to fresh air. Keep patient warm and at rest.

After skin contact: Remove contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact: Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses. Obtain medical attention.

After swallowing: Do NOT induce vomiting. Obtain medical attention.

5 Fire fighting measures

Suitable extinguishing agents:

Alcohol resistant foam, CO₂, powders, water spray.

For safety reasons unsuitable extinguishing agents:

Water jet.

Special hazards caused by the material, its products of combustion or flue gases:

Exposure to hazardous decomposition products may cause a health hazard.

Appropriate breathing apparatus may be required.

Fire will produce dense black smoke.

Cool closed containers exposed to fire with water.

Additional information: Collect run-off from fire fighting.

6 Accidental release measures

Person-related safety precautions:

Ventilate the area.

Measures for environmental protection:

If the product contaminates rivers and lakes or sewages inform respective authorities.

Do not allow to enter drains. If the product contaminates rivers and lakes or sewers inform respective authorities.

Measures for cleaning/collecting:

Clean preferably with a detergent.

Avoid use of solvents.

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local regulations. Clean preferably with a detergent.

Avoid use of solvents.



7 Handling and storage

Handling

Information for safe handling:

Avoid inhalation of vapour. Smoking, eating and drinking should be prohibited in application area. For personal protection see Section 8. Comply with health and safety at work laws. Avoid concentrations higher than the occupational exposure limits (see Section 8), if applicable.

Storage

Requirements to be met by storerooms and containers:

Keep container tightly closed. No smoking.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information about storage conditions:

Always keep in containers of the same material as the original one. Store in a dry, well ventilated place. Keep away from heat and direct sunlight. Store in accordance with the particular national regulations concerning water pollution.

Observe label precautions.

8 Exposure controls and personal protection

Additional information about design of technical systems:

If relevant apply technical measures to comply with the occupational exposure limits. This can be achieved by a good general extraction and - if practically feasible - by the use of a local exhaust ventilation.

Components with critical values that require monitoring at the workplace:

Numerical data - if specified - are taken from the valid national lists.

Personal protective equipment

Breathing equipment:

If the occupational exposure limits can't be met, in exceptional cases suitable respiratory protection should be worn only for a short period of time.

Protection of hands:

For prolonged or repeated contact use gloves. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Recommend protective glove: Article / Name / Material / Thickness Material / Breakthrough Time Remarks
Nr. 730/ Camatril Velours / Nitril / 0,4 mm Level 6 > 480 min. by full contact
Nr. 743/ Dermatril / Nitril / 0,2 mm Level 2 > 30 min. by splash contact

This recommendation is only for the product delivered by us and its intended purpose.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Use safety eyewear designed to protect against splash of liquids.

Body protection:

All parts of the skin should be washed after contact. Working clothes must not consist of textiles which show a dangerous melting behaviour in case of fire.



9 Physical and chemical properties:

General Information

Form: liquid
Colour: according to the tradename of the product
Smell: characteristic

Change in condition

Boiling point/Boiling range: 240°C
Flash point: > 100°C
Ignition temperature: 240°C
Self-inflammability: Product is not selfigniting.
Critical values for explosion:

Lower: approx. 0.6 Vol %
Upper: approx. 7.0 Vol %

Vapour pressure at 20°C: 0.1 hPa

Density at 20°C 0.82 g/cm³

Solubility in / Miscibility with Water: partly or not miscible

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Stable under recommended storage and handling conditions (see section 7).

Materials to be avoided:

Keep well away from oxidising agents and strongly alkaline or strongly acid materials in order to avoid exothermic reactions.

Dangerous products of composition:

Exposition to high temperatures may produce hazardous decomposition products such as: carbon dioxide, carbon monoxide and smoke.

11 Toxicological information

The Preparation is classified according to the conventional method (calculation method of the EC-directive 1999/45/EC). Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in skin dryness. The product may be absorbed through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

12 Ecological information:

The Product should not be allowed to enter drains of water courses or soil.

13 Disposal considerations

Product:

Recommendation Do not allow to enter drains.

European waste catalogue

08 03 12: waste ink containing dangerous substances

Uncleaned packagings:

Recommendation: Not orderly emptied cans and ink remnants are special waste.

14 Transport information

Not classified according to transport regulations for dangerous goods (like ADR/RID, IMDG and ICAO/IATA).

Maritime transport IMDG/GGVSea:

Marine pollutant: No



15 Regulatory information

Designation according to EC guidelines:
Code letter and hazard designation of product:

Xn  Harmful

Hazard-determining components of labelling: mineral oil

Risk phrases:

65 Harmful: may cause lung damage if swallowed.
66 Repeated exposure may cause skin dryness or cracking.

Safety phrases:

24 Avoid contact with skin.
29/35 Do not empty into drains; dispose of this material and its container in a safe way.
36 Wear suitable protective clothing.

National regulations

Technical instructions (air): III 100

VOC-Content (EU): 0.00 %

Mal-Code 00-1

16 Other information:

The information on this Safety Data Sheet is based on the present state of our knowledge and on current EU and national laws. The user's working conditions are beyond our knowledge and control. It is always the responsibility of the user to take all necessary steps in order to fulfil the demands laid down in the local rules and legislation. The information in this Safety Data Sheet is meant as a description of the safety requirements of our product: it is not to be considered as a guarantee of the product's properties.

Relevant R-phrases

50 Very toxic to aquatic organisms.
65 Harmful: may cause lung damage if swallowed.
66 Repeated exposure may cause skin dryness or cracking.

n.a.: not applicable

n.b.: not determined

B.Grauel GmbH

Seite 5 von 5

B. GRAUEL GmbH
Reuchlinstr. 10-11
D-10553 BERLIN (Moabit)
Federal Republic of Germany

Tel.: +49/(0) 30/34 99 37- 0
Fax: +49/(0) 30/34 99 37-22

Seat: Berlin
Registered no.: HRB 54350
in Berlin-Charlottenburg
General Director: W. T. Pijnenburg

e-mail: grauel@grauel.de
Internet <http://www.grauel.de>

ABN-AMRO Bank N.V.
Niederlassung Deutschland
Bank code: 502 304 00
Account no.: 20 18 861 018
Swift Code: ABN AD EFF FRA
VAT-no.: DE 167867007
IBAN: DE48 5023 04002018861018