



MATERIAL SAFETY DATA SHEET

Product name: Rubber Cement, Fixogum

Revision number: 1.0

Date of revision: 2008, February 25

I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the product

Name: Rubber Cement, Fixogum

Product code: LK-071 (A)

Produced and marketed by

KREATECH Biotechnology B.V.

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Intended use

Sealing of coverslips on glass slides

Emergency information:

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II. COMPOSITION / INFORMATION ON COMPONENTS

Composition/information on ingredients

Adhesive agent based on natural caoutchouc and on solvent

Component

Naphta (Petroleum), Hydrotreated Light

CAS number

64742-49-0

Range % by ^{weight}/volume

>85 < 90

III. IDENTIFICATION OF HAZARDS

Highly flammable, harmful if swallowed. May cause eye, skin and respiratory irritation, vapors may cause drowsiness and dizziness.

IV. FIRST AID MEASURES

EXPOSURE	SYMPTOMS	FIRST AID MEASURES
Inhalation	No data available.	If feeling unwell move individual to fresh air and seek medical advice.
Eye contact	No data available.	Flush with copious amounts of water with the eyelid held wide open. Seek medical advice.
Skin contact	No data available.	Wash with copious amounts of water. Remove contaminated clothing. DO NOT use solvents or thinners. Seek medical advice.
Ingestion	No data available.	Seek immediately medical advice. Keep at rest, do not induce vomiting.

V. FIRE FIGHTING MEASURES

▪ **Suitable extinguishing media**

Carbon dioxide, sand, dry chemical powder or appropriate foam.

Water jet should not be used because water is not mixable with a lot of organic solvents, and such solvents will spread on the water surface.

▪ **Special fire fighting procedure**

Wear self contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

- **Hazardous combustion or decomposition products**
Dangerous smoke gases such as carbon dioxide, carbon monoxide, and soot can be produced.
- **Fire and explosion hazards**
None identified.

VI. MEASURES TO BE TAKEN AFTER ACCIDENTIAL RELEASE OF THE SUBSTANCE/PREPARATION

Use appropriate protective equipment and methods to clean spilled substance promptly. Remove by liquid absorbing material (e.g. kieselguhr) and dispose of all waste in accordance with applicable laws. Avoid use of solvents.

VII. INFORMATION ON HANDLING AND STORAGE CONSIDERATIONS

- **Handling information**
We recommend that this product is handled only by those persons who have been trained in laboratory techniques and that it is used in accordance with the principles of good laboratory practice. As all chemical substances should be considered as potentially hazardous, wear suitable protective clothing such as a lab coat, safety glasses and gloves when handling fluid. Preferably handle in a chemical fume hood. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limit. Do not leave containers open. The product should only be used in areas from which all naked light and other sources of ignition have been excluded. Avoid contact with skin and eyes. Avoid inhaling of vapor and spray mist. When using do not eat, drink or smoke.
- **Stability**
The product is stable when stored under the recommended conditions.
- **Reactivity**
Keep away from oxidizing agents, strongly acid materials in order to avoid exothermic reactions.
- **Storage information**
Recommended storage temperature 15-20 °C.

VIII. PERSONAL PRECAUTIONS AND PROTECTION

- **Personal precautions**
Follow safe laboratory practices; the usual precautions, taken when handling chemicals, should be observed. We recommend that the product is handled only by those persons who have been trained in laboratory techniques and that it is used in accordance with the principles of good laboratory practice. As all chemical substances should be considered as potentially hazardous, wear suitable protective clothing such as a lab coat, safety glasses and gloves when handling fluid.

Do not inhale vapours; do not get in eyes, on skin or on clothing. Wash hands thoroughly after handling.

Eye wash stations and deluge showers should be available
- **Personal protection**
Respiratory protection: required when vapours/aerosols are generated. Preferably work in a chemical fume hood or wear adequate mask with filter (according to DIN 3181 for vapours of organic compounds).

Skin protection: required; wear suitable protective clothing and gloves.

Eye protection: required; wear safety glasses or goggles.

IX. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance and odor**
Fixogum Pasty, clear, colorless, mild benzine-like
- **Other parameters with regard to health, safety and environment**
 - pH: Inapplicable
 - Viscosity_{dynamic} (20°C): Not determined
 - Boiling range: 88 – 105 °C
 - Melting range: Not determined
 - Autoflammability: 270 °C
 - Flashing point: -12 °C
 - Explosion limits: upper 8,0 % vol, lower 2,0 % vol
 - Relative density: 0,73 g/cm³
 - Solubility in water: Insoluble
 - Solubility in ethanol: Not determined
 - Solubility in fat: Not determined
 - log P(o/w): Not determined

X. STABILITY AND REACTIVITY

The product is stable when stored under the recommended conditions

- **Conditions to avoid:** Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limit. Do not leave containers open. The product should only be used in areas from which all naked light and other sources of ignition have been excluded.
- **Substances to avoid:** Keep away from oxidizing agents, strongly acid materials in order to avoid exothermic reactions.
- **Dangerous Products of Decomposition:** Dangerous smoke gases such as carbon dioxide, carbon monoxide, and soot can be produced.

XI. TOXICOLOGICAL INFORMATION

- **Effect of decomposition products:** No data available.
- **Potential Hazards:** Harmful by inhalation or ingestion; irritating to eyes; skin; mucous membranes; nasal and respiratory passages and adverse effect on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness.
- **Carcinogenicity:** no data available.
- **Chronic effects:** Repeated or prolonged contact may cause removal of natural fat from skin resulting in non-allergic contact dermatitis and absorption through skin.

XII. ECOLOGIC INFORMATION

- **Ecotoxic effects:** Do not empty into drains. Do not allow product reach ground water, water course or sewage system. If the product contaminates lakes, rivers or sewages, inform appropriate authorities.
- **Biologic persistence / degradation:** no data available.

- **Mobility:** no data available; do not allow product to reach ground water course or sewage system.
- **Behaviour in environment:** no data available.

XIII. DISPOSAL CONSIDERATIONS

Product: Put only residues into household refuse. If residues are not dried, dispose of or incinerate in accordance with corresponding regulations.

Chemical residues generally count as special waste. Code of waste pursuant to European Council Directives on waste: 080409. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. Consult either the local, state or national authorities in charge or approved waste disposal companies, for advice on how to dispose of special waste.

Packaging: completely emptied containers can be used in the recycling chain with glass or tinplate. Containers with residues are to be treated as special waste. Contaminated packages should be treated the same as the product itself. Code of waste pursuant to European Council Directives on waste: 150104.

XIV. TRANSPORT INFORMATION

Land transport ADR/RID

Class	3
Packaging group	III
Hazard Id. No.	30
Label	3, -, -
UN number	1133
Technical name	Adhesives

Marine transport IMDG/GGVSee

Class	3
Packaging group	III
UN number	1133
Label	3
EmS	3-05
Proper shipping name	Adhesives

Air transport ICAO/IATA

Class	3
Packaging group	III
Label	3
UN number	1133
Proper shipping name	Adhesives

XV. REGULATIONS

Hazard symbols

F	Highly flammable
N	Dangerous for the environment
Xi	Irritant

R phrases

11	Highly flammable
38	Irritating to skin
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
67	Vapors may cause drowsiness and dizziness.

S phrases

2	Keep out of reach of children
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- 16 keep away from sources of ignition—no smoking
- 29 Do not empty in drains
- 62 If swallowed, do not induce vomiting: seek medical advice immediately and show container or label.
- 51 Use only in well-ventilated areas.

XVI. OTHER INFORMATION

EEC Risk statements:

- **R20/22:** harmful by inhalation and if swallowed
- **R36/37/38:** irritating to eyes, respiratory system and skin
- **S20/21:** when using do not eat, drink or smoke
- **S24/25:** avoid contact with eyes and skin
- **S29/56:** do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
- **S36/37/39:** wear suitable protective clothing, gloves and eye/face protection

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. We make no warranty express or implied, with respect to the information and assume no liability. Product users should determine the suitability of this information for their own uses.