sugru® / FORMEROL® F.10

Material Safety Data Sheet

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Version 2



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FORMEROL® technology is protected by the following international patent applications: US Patent Application 10/517,057 and related filings in Europe, China and India. US Patent Application 11/921,006 and related filings in Europe, Japan, China and India. US Patent Application 11/921,005 and related filings in Europe, Japan, China and India.

Section 1: Product and Company Identification

Product name sugru® / FORMEROL® F.10

Use Room Temperature Mouldable silicone

Supplier sugru, Inc.

c/o HOVS, 38120 Amrhein, Livonia,

MI 48150, USA

USA Contact number 0877 990 9888
E-mail contact support@sugru.com
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UK Contact number +44 (0) 207 7399446 (UK business hours)

Section 2. Hazards identification

2.1 Emergency Overview

Signal word None

Appearance Highly colored paste

Hazards There are no identified health risks associated with the product. However, the product contains substances whose health effects have not been well-

investigated, and therefore for industrial or commercial use it should be

handled with caution.

2.2 OSHA regulatory status

This material is not considered hazardous by the OSHA Hazard

Communication Standard (29 CFR 1910.1200)

2.3 Potential Health effects

Eye May cause irritation

Skin Not expected to cause irritation

Inhalation Inhalation is not an expected route of exposure for this product.

Ingestion Small amounts are not expected to be acutely harmful.

Chronic effects No information available.

2.4 Potential Environmental effects

The product is not classified for environmental effects.

However, the product contains substances whose environmental effects have not been well-investigated, and therefore it should be disposed of

with caution.

Section 3. Composition/information on ingredients

Declarable components Conc (wt%) CAS No.

None

Other components

Polysiloxane 25 to 50

Talc 25 to 50 18407-96-6

Additives 25 to 50

Section 4. First-aid measures

Eye contact In case of contact with eyes, irrigate with water for 15 minutes,

occasionally lifting eyelids. Remove any contact lenses if easy to do. Get

prompt medical advice if irritation occurs.

MSDS for MCM: #21-12425 and #21-12430

Skin contact Remove contaminated clothing and wash affected area with soap and

water. Get medical attention if irritation or other symptoms occur. Launder

contaminated clothing before re-use.

Inhalation If inhalation of the product is suspected, remove exposed person to fresh

air, and give rest. If the patient continues to feel unwell, get prompt

medical attention.

Ingestion If swallowed, wash out mouth thoroughly and give water to drink. Get

prompt medical attention if symptoms occur. Do not induce vomiting, un

less instructed by medical personnel.

Note to physicians Treat symptoms as they occur.

Section 5. Fire-fighting measures

5.1 Flammable properties

5.2 Extinguishing media Suitable

General fire-extinguishing agents such as water, carbon dioxide, and dry

chemicals.

Unsuitable Not available.

5.3 Protection of fire-fighters Specific hazards arising

from the chemical

The product is not flammable, but will decompose if involved in a fire,

producing smoke, and toxic fumes and gases.

Protective equipment and precautions

Remove containers from fire or cool them with water spray. Firefighters

should wear self-contained breathing apparatus and full protective

clothing.

Section 6. Accidental release measures

6.1 Personal precautions For large-scale spills, ensure full personal protection is worn. Keep

unauthorised personnel from the spillage area. Ventilate area. Follow prescribed procedures for responding to large spills and reporting to

authorities.

For recommended personal protective equipment, see Section 8.

For disposal considerations, see Section 13.

Environmental precautions Prevent product or run-off from clean-up operations from entering water

courses or drainage system.

Method for cleaning up Carefully sweep up or collect product, and place in suitable container for

disposal. Wash contaminated surfaces with water, and collect washings

for safe disposal.

Section 7. Handling and storage

7.1 Information for safe

handling

For industrial or commercial use, avoid contact with skin and eyes. Wear

protective clothing as in Section 8. Good general ventilation is recom

mended.

7.2 Storage Keep containers in a cool, dry place away from direct sunlight. Store in

sealed containers. Keep containers closed when not in use.

Section 8. Exposure controls/personal protection

8.1 Exposure Guidelines

US limit values Talc (containing no asbestos fibres): ACGIH TWA 2 mg/m3 (respirable);

NIOSH TWA 2 mg/m3 (respirable).

Engineering controls For industrial and commercial use, good general ventilation is

recommended.

8.3 Personal protective equipment (PPE)

The need for personal protective equipment should be based on a workplace risk assessment for the particular use. For industrial use, avoid

skin and eye contact by wearing chemical resistant gloves (eg nitrile, neoprene, PVC) and safety goggles. Where more extensive contact may

occur, wear suitable protective clothing (eg overalls, boots).

Wear respiratory protective equipment if exposure to dusts or vapours is possible. PPE should be to national standards. Consult manufacturers

concerning breakthrough times.

After work, wash hands before smoking, eating, or drinking. $\,\,$ P 2 / 4

Section 9. Physical and chemical properties

Appearance Highly coloured paste

Odour Characteristic Not available **Odour threshold** Not available pН Melting/freezing point Not available Initial boiling point/range Not available Flash point Not available **Evaporation rate** Not available Flammability (solid, gas) Not available Flamm. or expl. limits Not available Vapour pressure Not available Vapour density Not available Relative density 1.25 cubic cm **Solubilities** Not available

Partition coeff. (log Kow) Not available Auto-ignition temp. Not available

Starts at 210 degrees C / 410 F Decomposition temp.

Viscosity Not available

Section 10. Stability and reactivity

10.1 Reactivity Not available

10.2 Possibility of

Not available hazardous reactions

10.3 Chemical stability Product is supplied in sealed containers. Opening the container and

> exposing the product to air will cause the product to self-react to form a cured polymer. See packs for expiry date. Product used after the expiry date marked on the pack may not perform as well as product used within

the specified time.

10.4 Conditions to avoid Avoid prolonged storage at high temperature or exposure to sunlight.

10.5 Incompatible materials Acids, bases, and oxidising agents.

10.6 Hazardous

The product will polymerise on exposure to air. The polymerisation decomposition products

reaction is not hazardous.

Section 11. Toxicological information

The toxicology of the mixture has not been investigated. The following refers to uncured product. The cured product is not expected to have toxicological effects.

From assessment of the ingredients, the product is not expected to be **Acute toxicity**

harmful by oral or dermal routes. Inhalation is not expected.

Skin corrosion/irritation Some ingredients have been identified with irritant properties. From

extensive experience in use, the product does not have skin irritant

properties. Serious eye damage /

irritation The product may cause eye irritation.

Respiratory or skin

sensitisation No ingredient has been identified as having sensitising properties.

Germ cell mutagenicity Not available Not available Carcinogenicity Reproductive toxicity Not available STOT-single exposure Not available STOT-repeated exposure Not available **Aspiration hazard** Not available

Section 12. Ecological information

Toxicity Not available.

Persistence/degradability The product will self-react to form a polymer in the environment. The

polymer is expected to persist in the environment.

Bioaccumulation potential Mobility in environmental

Other adverse effects

media

The polymer is insoluble in water and involatile, and will persist in the soil

compartment. Not available.

No data available.

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P3/4

Section 13. Disposal considerations

Incineration or landfill are the recommended methods of disposal for the product, or the polymer it forms on reaction with air. Dispose of contaminated product, empty containers and materials used in cleaning up spills or leaks in accordance with current local, state, or federal regulations. Local regulations may be more stringent than federal requirements.

Section 14. Transport information

14.1 Basic shipping description

Identification number Not classified according to US DOT.

Proper shipping name
Hazard class
Packing group
Environmental hazards
Not applicable
Not applicable
Not applicable

14.2 Additional information Not available

Section 15. Regulatory information

US Federal regulations

	Ingredient		Section 304 EHS RQ	CERCLA RQ	Section 313	RCRA Code	CAA 112(r) TQ
	None	No	No	No	No	No	No

OSHA: Hazard Communication Rule, 29 CFR, 1910.1200.

EPCRA (Emergency Planning and Community Right-to-Know Act): Section 302: Extremely Hazardous Substances (EHS), Threshold Planning Quantity (TPQ) in 40 CFR 355; EPCRA Section 304 gives EHS reportable quantities (RQ); Section 313 Toxic Chemicals, subject to annual reporting (40 CFR 372). CERCLA (Comprehensive Environmental Response Compensation and Liability Act), Hazardous Substances; accidental release of substances above the Reportable Quantity (RQ) listed requires reporting; local reporting requirements may be in force.

RCRA Hazardous Wastes: RCRA P and U lists (40 CFR 261.33).

CAA Substances for Accidental Release Prevention: Clean Air Act 112 (r), Hazardous Air Pollutants; Threshold Quantities (TQ).

Other regulatory Not available

Section 16: Other information

Revisions This SDS is the first version in US format.

Abbreviations ACGIH, US American Conference of Governmental Industrial Hygienists;

NIOSH, US National Institute for Occupational Safety and Health; REL, recommended exposure limit; STOT RE, specific organ toxicity repeated exposure; STOT SE, specific target organ toxicity single exposure; TWA,

time-weighted average.

References Annex VI of EU Regulation 1272/2008 on Harmonised Classification and

Labelling for Certain Hazardous Substances.

Existing Chemical Substances Information System (ESIS) available at the European Chemical Bureau website: http://ecb.jrc.ec.europa.eu/esis/.

Supplier safety data sheets.

Guide to Occupational Exposure Values; ACGIH, 2009.

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