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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.

1. Identification of the substance/preparation and company/undertaking

Product name	FORMEROL F.03 / sugru
Use	Room Temperature Mouldable silicone
Supplier	FormFormForm Ltd. 13 Hague Street London E2 6HN, UK
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2. Hazards identification

Classification	Not dangerous (CHIP 4 2009)
Health hazards	Contains Methyltris(methylethylketoxime)silane and Gamma-Aminopropyl Triethoxysilane. May cause an allergic reaction. Persons known to be allergic to these substances should avoid skin contact with the uncured product. Persons with sensitive skin are advised to wear protective gloves.
Environmental hazards	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 handled with caution.
Fire and explosion hazards	No fire or explosion hazards have been identified.

3. Composition/information on ingredients

Hazardous components	Conc (%)	EC No.	CAS No.	Classification ^a
Diocetyl tin dilaurate	<0.1		3648-18-8	Xi, R10 R36/37/38
Methyltris(methylethylketoxime)silane	<1	245-366-4	22984-54-9	Xi, R20/36/43/66
Gamma-Aminopropyl Triethoxysilane	<1	213-048-4	919-30-2	Xn,R22 C;R34

^aSee Section 16 'Other information' for full text of the R-phrases.

4. First-aid measures

Skin contact	Wash affected area with soap and water. Get medical attention if irritation occurs.
Eye contact	In case of contact with eyes, irrigate with water for 10 minutes, occasionally lifting eyelids, and removing contact lenses if easy to do. Seek medical advice if irritation (pain, redness, or swelling) or other symptoms occur.
Ingestion	If swallowed, wash out mouth thoroughly and give water to drink. Seek medical attention. Do not induce vomiting, unless instructed by medical personnel.
Inhalation	Not expected to be a normal route of exposure. If inhalation of the product is suspected, remove exposed person to fresh air, and give rest. If the patient feels unwell, obtain medical attention.
Medical treatment	Show this safety data sheet to medical personnel. Give symptomatic treatment and supportive therapy.

5. Fire-fighting measures

Fire and explosive properties

The product is not flammable, but will burn if involved in a fire. No explosive properties have been identified.

Extinguishing media

Water spray, carbon dioxide, dry chemical powder and alcohol-resistant foam are recommended. Remove containers away from fire or cool them with water.

Specific hazards

During combustion, or when heated sufficiently, product may decompose to form smoke and toxic fumes, gases or vapours.

Protective equipment for fire fighters

Fire fighters should wear an approved self-contained breathing apparatus and full protective clothing.

6. Accidental release measures

Personal precautions

For large-scale spills, ensure personal protection is worn (see Section 8). Keep unauthorised personnel from the spillage area.

Environmental precautions

Prevent product from entering water-courses or drainage system.

Method for cleaning up

Stop the source of leak or release. Clean up spill as soon as possible.

Small spills can be mopped up with cloth or paper, or pieces can be picked up. Collect larger spill using a pumping techniques or industrial vaccum cleaner. Place material in suitable container for disposal in accordance with local and national regulations. Wash contaminated surfaces with water and detergent, and collect washings for safe disposal. Follow prescribed procedures for responding to large spills and reporting to appropriate authorities.

7. Handling and storage

Information for safe handling

For industrial use, avoid contact with skin and eyes. Wear protective clothing as in Section 8. Good general ventilation is recommended.

Storage

Keep containers in a cool, dry place away from direct sunlight. Store in sealed containers. Keep containers closed when not in use.

8. Exposure controls/personal protection

EU Occupational exposure limits (IOELVs)

None

UK Occupational exposure limits (WELs)

Talc, respirable dust: long-term exposure limit (8 h TWA), 1 mg/m³.

Engineering measures

Good general ventilation is recommended.

Personal protective equipment

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 apron, sleeves, boots). Wear suitable respiratory protective equipment if exposure to vapour is possible (eg through heating). Consult manufacturers concerning breakthrough times. PPE should be to European (EN) standards.

9. Physical and chemical properties

Appearance

Highly coloured paste

Odour

Characteristic

Boiling point

No data available

Vapour pressure

No data available

Density

No data available

Solubility in water

Insoluble

Viscosity

No data available

10. Stability and reactivity

Conditions to avoid	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. Avoid prolonged storage at high temperature or exposure to sunlight.
Materials to avoid	Acids, bases, and oxidising agents.
Hazardous decomposition products	The product will polymerise on exposure to air. The polymerisation reaction is not hazardous.

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.

Acute toxicity	The product is not expected to be harmful by oral or dermal routes. Inhalation is not expected.
Corrosivity/irritation	Some ingredients have been identified with irritant properties. Repeated or prolonged contact may cause skin irritation.
Sensitisation	Methyltris(methylethyl-ketoxime)silane and Gamma-Aminopropyl Triethoxysilane have skin sensitising properties.
Repeated-dose toxicity	No data available
Mutagenicity/Carcinogenicity/Reproductive toxicity	No data available.

12. Ecological information

The ecotoxicology of the mixture has not been investigated.

Mobility	The product is a water-insoluble paste.
Persistence/degradability	No data available.
Bioaccumulation	No data available.
Toxicity	No data available.

13. Disposal considerations

The product is not classified as dangerous and may be suitable for landfill or incineration. Disposal must be in accordance with current national and local regulations. Chemical residues generally count as special waste, and their disposal may be regulated in the EC member countries through corresponding laws and regulations. General EU requirements are given in the Waste Framework Directive (75/442/EEC) and the Hazardous Waste Directive (91/689/EEC). Packaging may contain residues of the product and should be treated accordingly.

14. Transport information

Not classified as dangerous goods.

15. Regulatory information

Classification and labelling according to EC Directives

Classification Not dangerous

Symbol and indication of danger

None

Risk phrases None

Safety phrases None

Contains Methyltris(methylethyl-ketoxime)silane and Gamma-Aminopropyl Triethoxysilane. May cause an allergic reaction.

European directives and regulations

EU Directive 67/548/EEC (Dangerous Substances Directive), and 99/45/EC (Dangerous Preparations Directive) with amendments.

This Safety Data Sheet is based on Regulation 1907/2006 (REACH).

Personal protective equipment (PPE): 89/686/EEC.

European occupational exposure limits: 2000/39/EC.

Protection of health and safety of workers: 98/24/EC.

UK legislation

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (CHIP4).
Control of Substances Hazardous to Health Regulations 1999 SI 1999/437.
Health and Safety at Work Act 1974 c 37.
Personal Protective Equipment (EC Directive) Regulations SI 1992/3139.
Environmental Protection Act 1990 c 43.
The Environment Act 1995 c 25.
Special Waste Regulations 1996 SI 1996/972.
Carriage of Dangerous Goods by Road and Rail (Classification, Packaging and Labelling) Regulations.

Guidance

The Compilation of Safety Data Sheets (Third Edition) (CHIP 3 Approved Code of Practice).
Approved Classification and Labelling Guide (Fifth Edition).
Approved Supply List. Information approved for the classification and labelling of substances and preparations dangerous for supply.
COSHH Essentials: Easy steps to chemical control.
Occupational Exposure Limits EH40.

16. Other information

Revisions: This SDS is the second European version.

Risk phrase explanations: R10 Flammable, R20, harmful by inhalation; R22 harmful if swallowed; R34 causes burns; R25, toxic if swallowed; R36 irritating to eyes; R37, irritating to respiratory system; R38, irritating to skin; R43 may cause sensitisation by skin contact; R66 repeated exposure may cause skin dryness or cracking;

The classification of the product has been assessed according to the calculation method given in 99/45/EC on the basis of available information for the ingredients.

References

Annex 1 of 67/548/EEC.
Ingredient safety data sheets.

IUCLID Datasets, available at the European Chemicals Bureau website.
