SAFETY DATA SHEET

Microset 101 Silicone Polymer Compound Part B

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is provided voluntarily and is prepared in accordance with formatting described in the REACH Regulation (EC) No 1907/2006, and described in CLP Regulation (EC) No 1272/2008.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: **Microset 101 Silicone Polymer Compound Part B**

Synonyms, Trade Names: **MICROSET 101 BLACK, MICROSET 101 GREY Including: "MICROSET 101SS", "MICROSET 101FF", "MICROSET 101TH" "MICROSET 101TH(s)", "MICROSET 101RF", "MICROSET 101RT" "MICROSET 101XF", "MICROSET 101XFT", "MICROSET 101FS" "MICROSET 101XF SLOW", "MICROSET 101XFT SLOW" "MICROSET 101XF30", "MICROSET WHITE" "MICROSET 101FFS"**

1.2 Relevant identified uses of the substance or mixture and uses advised against
Moulding of metal surfaces. No known uses advised against.

1.3 Details of the supplier of the safety data sheet

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Australian Distributor Information:

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7/38 Waratah Street
Kirrawee, NSW 2232
02 9545 4433
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Emergency Only Contact Australia: 000

1.4 Emergency telephone number

In case of emergency Tel. +44 (0)1455 634508 **(8.30am to 5.30pm, Monday to Friday)**

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture
Not classified as hazardous according to the CLP Regulation (EC) No 1272/2008

2.2 Label elements
No label required.

2.3 Other hazards
Physical hazards: Not classified as flammable, but will burn if involved in a fire.

Health hazards: No specific symptoms noted by any route of exposure.
Environmental hazards: Not classified as hazardous to the environment. Contains octamethylcyclotetrasiloxane (PBT), decamethylcyclopentasiloxane (vPvB) and dodecamethylcyclohexasiloxane (vPvB). Contains no substances known to have endocrine disrupting properties.

SECTION 3: Composition

3.1 Substances
Not applicable, the product is a mixture.

3.2 Mixtures
MICROSET products are formulated as mixtures of the following components:

Name	CAS/EC/Registration Nos	Concentration % w/w	Classification
Octamethylcyclotetrasiloxane (D4)	556-67-2 209-136-7 01-2119529238-36-XXXX	≤ 1%	Flam. Liq. 3 H226 Repr. 2 H361f Aquatic Chronic 4 H413 PBT vPvB
Decamethylcyclopentasiloxane (D5)	541-02-6 208-764-9 01-2119511367-43-XXXX	≤ 1%	vPvB
Dodecamethylcyclohexasiloxane (D6)	540-97-6 208-762-8 01-2119517435-42-XXXX	≤ 1%	vPvB
Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes	68478-92-2 270-844-4 01-2120224513-67-XXXX	≤ 1%	Flam. Liq. 2 H225 Repr. 2 H361d

See section 16 for full text of H statements

SECTION 4: First Aid Measures

4.1 Description of first aid measures
EYE CONTACT: Wash thoroughly with water and obtain medical attention if signs of discomfort.
INHALATION: Remove from exposure. If breathing becomes difficult call a doctor.
SKIN CONTACT: Wash off with soap and water. Seek medical attention.
INGESTION: If swallowed, rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
No specific symptoms identified

4.3 Indication of any immediate medical attention and special treatments needed
Symptomatic treatment as required

SECTION 5: Firefighting Measures

5.1 Extinguishing media
Suitable extinguishing media: Foam. Powder. Carbon dioxide (CO_2).
Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire. Alkaline powders.

5.2 Special hazards arising from the substance or mixture
Will burn if involved in a fire. Use water spray to cool containers. Polymerisation of components may occur at elevated temperatures, resulting in potential bursting of sealed containers. Keep containers cool. Fires involving large numbers of cartridges may evolve irritating fumes. Prevent run-off from fire from entering water courses and sewers.

5.3 Advice for fire fighters
Self-contained breathing apparatus and thermal protective clothing must be worn in case of fire

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Remove ignition sources. Wear suitable protective clothing including gloves and eye protection to avoid unnecessary skin or eye contact. Spillages may be slippery.

6.2 Environmental precautions
Prevent entry into sewers and watercourses. If large quantities of product enters sewers or watercourses, inform the appropriate environmental authorities.

6.3 Methods and materials for containment and clearing up
Small spills: Wipe up with paper towels and place in a suitable container for disposal. Wash the spill area with detergent and water.

Large spills: Mix spillage with a suitable non-combustible absorbent, e.g. sand or earth, and scrape up and place in a suitable container for disposal. Do not use absorbents that are basic (alkaline). Wash the spill area with detergent and water.

Containers with collected spillage must be properly labelled with correct contents.

6.4 References to other sections
See section 8 for further advice on PPE and section 13 for further advice on disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Use in well ventilated areas.

7.2 Conditions for safe storage, including any incompatibilities
Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures. Store in closed original container.

7.3 Specific end uses(s)
No specific industry guidelines available.

SECTION 8. Exposure Controls/Personal Protection

8.1 Control parameters

None identified.

8.2 Exposure controls

Engineering controls
Not normally required. If sprays, mists, etc are likely to be formed use local exhaust ventilation to minimise exposure.

Respiratory protection
Not normally required.

Hand Protection
Under normal usage the MICROSET application system will allow the material to be dispensed safely and cleanly to the appropriate location without the need for protective gloves or goggles, however, these may be worn as a precaution especially in confined or difficult working conditions. Gloves made of Nitrile, Polyvinyl chloride (PVC), Rubber or plastic may be suitable, but manufacturer recommendations should

always be consulted. Change gloves in accordance with manufacturer recommendations. If gloves are damaged during use, remove immediately and wash hands before replacing with new gloves.

Eye protection
Not normally required, but if contact with eyes is likely wear suitable eye protection to protect from splashes, meeting the requirements of BS EN166 3, when handling this product.

Skin protection
Aprons or coveralls are recommended. These should be changed after use or if contaminated. Wash before re-use.

Environmental Exposure Controls
Take suitable measures to prevent entry into drains, sewers and watercourses.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Physical state	viscous liquid
b) Colour	translucent
c) Odour	Slight
d) Melting point/freezing point	Not available
e) Boiling point or initial boiling point and boiling range	Not available
f) Flammability	Not applicable
g) Lower and upper explosion limit	Not available
h) Flash point	> 150 °C (Closed cup according to method Afnor T 60103.)
i) Auto-ignition temperature	400°C
j) Decomposition temperature	> 200°C
k) pH	Not applicable
l) Kinematic viscosity	18 000 mm^2/s (25 °C)
m) Solubility	Water: Practically insoluble Acetone: Practically Insoluble, Alcohol: Practically Insoluble, Diethylether.: Dispersible, Aliphatic hydrocarbons.: Dispersible, Aromatic hydrocarbons.: Dispersible, Chlorinated solvents.: Dispersible
n) Partition coefficient n-octanol/water (log value)	Not available
o) Vapour pressure	Not available
p) Density and/or relative density	Approximately 1.12 (20 °C)
q) Relative vapour density	Not available
r) Particle characteristics	Not applicable

9.2 Other information
None available

SECTION 10: Stability and Reactivity

10.1 Reactivity
Not considered to be a reactive material

10.2 Chemical stability
Stable under normal conditions of use and storage

10.3 Possibility of hazardous reactions
During Storage, This product may generate hydrogen gas. Quantity of hydrogen potentially released (l/kg of product): < 4

10.4 Conditions to avoid

None noted.

10.5 Incompatible materials
Strong oxidizing agents. Alkalis and caustic products. Chemical compounds with mobile hydrogen, in the presence of metal salts and complexes.

10.6 Hazardous decomposition products
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Amorphous silica.

SECTION 11: Toxicological Information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

(a) acute toxicity	based on available data, the classification criteria are not met Octamethylcyclotetrasiloxane: LC 50 (Rat, 4 h): > 36 mg/l Decamethylcyclopentasiloxane LC 50 (Rat): 8,67 mg/l
(b) skin corrosion/irritation	based on available data, the classification criteria are not met
(c) serious eye damage/irritation	based on available data, the classification criteria are not met
(d) respiratory/skin sensitisation	based on available data, the classification criteria are not met
(e) germ cell mutagenicity	based on available data, the classification criteria are not met
(f) carcinogenicity	based on available data, the classification criteria are not met
(g) reproductive toxicity	based on available data, the classification criteria are not met Octamethylcyclotetrasiloxane: Rat (Inhalation): NOAEL 3,64 mg/l OECD 416 Decamethylcyclopentasiloxane: Rat (Inhalation): NOAEL 3,64 mg/l OECD 416 Dodecamethylcyclohexasiloxane: Rat, Oral NOAEL >= 1 000 mg/kg Method: OECD 422, OECD 414
(h) STOT-single exposure	based on available data, the classification criteria are not met
(i) STOT-repeated exposure	based on available data, the classification criteria are not met Octamethylcyclotetrasiloxane: NOAEL (Rat, Inhalation): 1,820 mg/l Method: OECD 453 NOAEL (Rabbit, Dermal): 960 mg/kg Method: OECD 411 Decamethylcyclopentasiloxane: NOAEL (Rat, Oral): >= 1 000 mg/kg NOAEL (Rat, Inhalation - vapor): >= 2,42 mg/l NOAEL (Rat, Dermal): >= 1 600 mg/kg Dodecamethylcyclohexasiloxane: NOAEL (Rat, Oral): >= 1 000 mg/kg Method: OECD 422 NOAEL (Rat, Inhalation - vapor): 0,0182 mg/l Method: OECD 413
(j) aspiration hazard	based on available data, the classification criteria are not met

11.2 Information on other hazards

None of the components are known to have endocrine disrupting properties.

SECTION 12: Ecological Information

12.1 Toxicity

The product is not classified as hazardous to the aquatic environment.

Octamethylcyclotetrasiloxane:
LC 50 (Oncorhynchus mykiss, 96 h): >= 0,022 mg/l
EC 50 (Water flea (Daphnia magna), 48 h): > 0,015 mg/l
NOEC (Oncorhynchus mykiss, 93 d): >= 0,0044 mg/l
NOEC (Water flea (Daphnia magna), 21 d): 0,015 mg/l
EC 50 (Green algae (Selenastrum capricornutum), 96 h): > 0,022 mg/l

Decamethylcyclopentasiloxane:
NOEC (Oncorhynchus mykiss, 90 d): >= 0,014 mg/l
NOEC (Water flea (Daphnia magna), 21 d): >= 0,0046 mg/l
NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): >= 0,002 mg/l
EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): > 0,002 mg/l

Dodecamethylcyclohexasiloxane:
LC 50 (Oncorhynchus mykiss; 96 h ; Flow through): > 0,016 mg/l OECD 204
EC 50 (Water flea (Daphnia magna); 48 h ; Flow through): > 0,0029 mg/l OECD 202
NOEC (growth rate) (Algae (Pseudokirchneriella subcapitata); 72 h; Static): >= 0,002 mg/l OECD 201
ErC50 (Algae (Pseudokirchneriella subcapitata); 72 h ; Static) : > 0,002 mg/l OECD 201
NOEC (Oncorhynchus mykiss; 90 d; Flow through) : >= 0,014 mg/l OECD 210
NOEC (Water flea (Daphnia magna); 21 d ; semi-static): >= 0,0046 mg/l OECD 211

12.2 Persistence and degradability

The organic components in this product are expected to degrade very slowly.

Octamethylcyclotetrasiloxane
3.7 % (29 d) The component substance is not considered to be readily biodegradable.

Decamethylcyclopentasiloxane
0.14 % (28 d) The component substance is not readily biodegradable.

Dodecamethylcyclohexasiloxane
4.5 % (28 d, OECD 310) The component substance is not readily biodegradable.

12.3 Bioaccumulative potential

Component substances have the potential to bioaccumulate.

Octamethylcyclotetrasiloxane
Fathead Minnow, Bioconcentration Factor (BCF): 12 400

Decamethylcyclopentasiloxane
Fathead Minnow, Bioconcentration Factor (BCF): 7 060

Dodecamethylcyclohexasiloxane
Fathead Minnow, Bioconcentration Factor (BCF): 2 860 (OECD 305)

Platinum, 1,3-diethenyl-1,1,3,3-tetramethyldisiloxane complexes :
Log Kow: 5.96 (calculated)

12.4 Mobility in soil

Once cured, this product is not expected to be mobile in the environment.

12.5 Results of PBT and vPvB assessment

Information on component substances:

Octamethylcyclotetrasiloxane: Meets PBT (persistent/bioaccumulative/toxic) criteria

Decamethylcyclopentasiloxane: Meets vPvB criteria

Dodecamethylcyclohexasiloxane: Meets vPvB criteria

12.6 Endocrine disrupting properties
None of the components are known to have endocrine disrupting properties.

12.7 Other adverse effects
None known.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods
Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Incinerate in suitable combustion chamber is suggested.

Contaminated packages should be as empty as possible. Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Recycle following cleaning or dispose of at an authorised site.

European Waste Codes: Unused product: 07 02 17

SECTION 14: Transport Information

Not classified as dangerous goods

	ADR	IMDG	ICAO
14.1 UN Number	None	None	None
14.2 UN Proper shipping name	None	None	None
14.3 Transport hazard class(es)	None	None	None
14.4 Packing group	None	None	None
14.5 Environmental hazards	None	None	None
14.6 Special precautions for user	None	None	None
14.7 Maritime transport in bulk according to IMO instruments	Not applicable	Not applicable	Not applicable

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU REACH: This product contain substances listed on the Candidate List of Substances of Very High Concern
Octamethylcyclotetrasiloxane (D4) PBT
Decamethylcyclopentasiloxane (D5) vPvB
Dodecamethylcyclohexasiloxane (D6) vPvB

Inventory Status

Australia AICS: On or in compliance with the inventory
Canada DSL Inventory List: On or in compliance with the inventory
Japan (ENCS) List: On or in compliance with the inventory
China Inv. Existing Chemical Substances: On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory
Philippines PICCS: On or in compliance with the inventory
US TSCA Inventory: On or in compliance with the inventory
New Zealand Inventory of Chemicals: On or in compliance with the inventory

15.2 Chemical Safety Assessment
A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: Other Information

Revision information: Reformatted in compliance with Regulation (EC) No 1907/2006, as amended by Regulation (EU) 2020/878. Sections 2, 3, 11, 12, 15 updated

List of Abbreviations used in this SDS:
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging Regulation (EC) no 1272/2008
EC European Community/Commission
PBT Persistent, Bioaccumulative and Toxic
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB very Persistent, very Bioaccumulative

References:
ECHA CHEM database
Suppliers' SDSs for component substances

Method used for classification of mixtures:
Ingredient based approaches

H Statements used in Section 3
H225 Highly flammable liquid and vapour
H226 Flammable liquid and vapour
H361f Suspected of damaging fertility
H361d Suspected of damaging the unborn child
H413 May cause long lasting harmful effects to aquatic life

Training requirements for workers
No special requirements