

SAFETY DATA SHEET



Microset 101 Silicone Polymer Compound Part A

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 A

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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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

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist

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 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
Titanium dioxide [Grey putty only]	13463-67-7 236-675-5 01-2119489379-17-XXXX	≤ 5%	Carc Cat. 2 H351i
Carbon black	1333-86-4 215-609-9 01-2119384822-32-XXXX	≤ 1%	Not classified as hazardous
Dodecamethylcyclohexasiloxane (D6)	540-97-6 208-762-8 01-2119517435-42-XXXX	≤ 1%	vPvB

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 (CO₂).

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

Occupational Exposure Limits

Name	Long-term exposure limit (8-hr TWA reference period)	Short-term exposure limit (15-minute reference period)	Reference, Comments
Titanium dioxide			EH40, 2020
total inhalable	10 mg/m ³	—	
respirable	4 mg/m ³	—	
Carbon black	3.5 mg/m ³	7 mg/m ³	EH40, 2020

Derived No Effect Levels (DNELs)

Substance name	End Use	Exposure routes	Potential health effects	Value
Titanium dioxide	Workers	Inhalation	Long-term local effects	10 mg/m ³
	Consumers	Oral	Long-term systemic effects	700 mg/kg bw/day
Carbon black	Worker	Inhalation (inhalable fraction)	Long-term systemic effects	2 mg/m ³

	Worker	Inhalation (respirable fraction)	Long-term systemic effects	0.5 mg/m ³
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Predicted No Effect Concentrations (PNECS)

name	Environmental Compartment	Value
Titanium dioxide	Marine water	0,0184 mg/l
	Marine sediment	100 mg/kg
	Fresh water sediment	1000 mg/kg
	Fresh water	0,184 mg/l
	Freshwater - intermittent	0,193 mg/l
	Sewage treatment plant	100 mg/l
	Soil	100 mg/kg

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	Black or grey
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.

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 Titanium dioxide: LD50 (Rat, female): > 5 000 mg/kg (OECD 425) LC50 4 h dust/mist (Rat, male): > 6,82 mg/l Carbon black LD50 (Rat): > 8 000 mg/kg
(b) skin corrosion/irritation	based on available data, the classification criteria are not met Titanium dioxide: Rabbit - No skin irritation (OECD 404) Carbon black

	Rabbit - No skin irritation
(c) serious eye damage/irritation	based on available data, the classification criteria are not met Titanium dioxide: Rabbit - No eye irritation (OECD 405) Carbon black Rabbit - No eye irritation (OECD 405)
(d) respiratory/skin sensitisation	based on available data, the classification criteria are not met Titanium dioxide: Mouse LLNA – not sensitising (OECD 429) Carbon black Guinea pig – Buhler test, not sensitising (OECD 406)
(e) germ cell mutagenicity	based on available data, the classification criteria are not met Titanium dioxide: In vitro- Ames Test – negative (OECD 471) In vitro – mammalian cell mutation – negative (OECD 476) In vitro – chromosome aberration – negative (OECD 473) In vivo – mouse micronucleus – negative (OECD 474)
(f) carcinogenicity	based on available data, the classification criteria are not met Titanium dioxide: Rat, oral (103 weeks) NOAEL > 50,000 ppm Titanium dioxide had been classified by IARC as Category 2B (possibly carcinogenic to humans) Carbon black: Rat, 2 years, inhalation – tumours observed under “lung overload” conditions
(g) reproductive toxicity	based on available data, the classification criteria are not met Titanium dioxide: Effects on foetal development, Rat, Oral, NOAEL 1000 mg/kg body weight (OECD 414) Dodecamethylcyclhexasiloxane: 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 Titanium data: Rat, inhalation, 2 year NOAEL 10 – 50 Carbon black Rat, inhalation (respirable fraction), 90d NOAEC 1 mg/m ³ Dodecamethylcyclhexasiloxane: 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.

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.

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.

Dodecamethylcyclohexasiloxane

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

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:

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
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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 contains substances listed on the Candidate List of Substances of Very High Concern: 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

H351i Suspected of causing cancer by inhalation

Training requirements for workers

No special requirements