



CP2840 v 1.3 RS 180-5307,180-5311

RS-GCS-027-SM5 SILICONE THERMAL GREASE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 26/10/2015 Revision date: 28/01/2021 Supersedes version of: 06/11/2020 Version: 1.3

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

1.1. Product identifier

Product form : Mixture
Product name : RS-GCS-027-SM5 SILICONE THERMAL GREASE
UFI : ARED-X0TY-900F-FKG2
Product code : GCS-027-SM5
Type of product : Thermal interface material, Fillers, putties, plasters, modelling clay, Paste

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Fillers
Conductive agents
Function or use category : Fillers, Conductive agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

UK

RS Components Ltd
Birchington Road
Corby,
Northants,
NN17 9RS
T + 44 (0) 845 850 9900
RCustomerServicesUK@rs-components.com

Ireland

RS Components Ltd
Glenview Industrial Estate
Herberton Road
Rialto
Dublin 12
Tel No +353 (0) 1 415 3100
enquiries.ie@rs-components.com

1.4. Emergency telephone number

Emergency number : +44 1865 407 333 (24hr), +44 1235 239670 (24hr)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Carcinogenicity, Category 2 H351
Hazardous to the aquatic environment — Acute Hazard, Category 1 H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410
Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

GHS09

Signal word (CLP) :

Warning

Contains :

CARBON BLACK MESOPOROUS

Hazard statements (CLP) :

H351 - Suspected of causing cancer (oral).

H410 - Very toxic to aquatic life with long lasting effects.

H400 - Very toxic to aquatic life.

Precautionary statements (CLP) :

P202 - Do not handle until all safety precautions have been read and understood.

P273 - Avoid release to the environment.

P280 - Wear eye protection, protective gloves.

P308+P313 - IF exposed or concerned: Get medical advice/attention. medical advice.

P391 - Collect spillage.

P501 - Dispose of contents and container to a hazardous or special waste collection point.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
SILICONE - A	(CAS-No.) 90337-93-2	15 – 35	Not classified
ZINC OXIDE	(CAS-No.) 1314-13-2 (EC-No.) 215-222-5 (EC Index-No.) 030-013-00-7	10 – 30	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)
CARBON BLACK MESOPOROUS	(CAS-No.) 1333-86-4 (EC-No.) 215-609-9	25	Carc. 2, H351

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Inhalation may cause irritation (cough, short breathing, difficulty in breathing).
Symptoms/effects after skin contact : Causes mild skin irritation.
Symptoms/effects after eye contact : mild eye irritation.
Symptoms/effects after ingestion : Ingestion may cause nausea and vomiting. May cause irritation to the digestive tract.

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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

CARBON BLACK MESOPOROUS (1333-86-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Carbon black
WEL TWA (OEL TWA) [1]	3.5 mg/m ³
WEL STEL (OEL STEL)	7 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Combined gas/dust mask with filter type A/P3.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:			
Type	Field of application	Characteristics	Standard
Safety glasses	Dust, Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:	
Type	Standard
Disposable gowns, Disposable sleeves	

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Hand protection:					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.11		EN 374-2

Other skin protection		
Materials for protective clothing:		
Condition	Material	Standard
Less resistance:	Polyethylene	

8.2.2.3. Respiratory protection

Respiratory protection:			
In case of insufficient ventilation, wear suitable respiratory equipment			
Device	Filter type	Condition	Standard
Disposable half mask	Type P3	Long term exposure, Vapour protection	EN 140

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Grey.
Odour	: odourless.
Odour threshold	: No data available
pH	: Approx. 7
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: > 35 °C
Flash point	: > 93 °C
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 2.5
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

CARBON BLACK MESOPOROUS (1333-86-4)

LD50 oral rat	> 8000 mg/kg
LD50 dermal rabbit	> 3000 mg/kg

ZINC OXIDE (1314-13-2)

LD50 oral rat	7950 mg/kg
LC50 Inhalation - Rat	2500 mg/kg

Skin corrosion/irritation : Not classified
pH: Approx. 7
Serious eye damage/irritation : Not classified
pH: Approx. 7
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer (oral).

CARBON BLACK MESOPOROUS (1333-86-4)

IARC group	2B - Possibly carcinogenic to humans
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Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

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Viscosity, kinematic	Not applicable
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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects. Before neutralisation, the product may represent a danger to aquatic organisms. Very toxic to aquatic life.

Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

Not rapidly degradable

CARBON BLACK MESOPOROUS (1333-86-4)

LC50 - Fish [1]	> 1000 mg/l
EC50 72h - Algae [1]	> 10000 mg/l

ZINC OXIDE (1314-13-2)

LC50 - Fish [1]	1.1 mg/l
EC50 - Crustacea [1]	0.098 mg/l

12.2. Persistence and degradability

CARBON BLACK MESOPOROUS (1333-86-4)

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

CARBON BLACK MESOPOROUS (1333-86-4)

Bioaccumulative potential	No bioaccumulation data available.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Aquatic Acute 1

Hazardous to the aquatic environment — Acute Hazard, Category 1

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Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.