



# RS-GCS-014-SM4 SILICONE THERMAL GREASE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Date of issue: 10/26/2015 Revision date: 2/27/2019 Supersedes: 2/27/2019 Version: 1.2

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

#### 1.1. Product identifier

Product form : Mixture UFI Number UNED-F04J-Y00Y-T7W0  
Product name : RS-GCS-014-SM4 SILICONE THERMAL GREASE  
Product code : GCS-014-SM4  
Type of product : Fillers, putties, plasters, modelling clay, Thermal interface material, 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

##### Supplier

##### UK

RS Components Ltd  
Birchington Road  
Corby  
Northants  
NN17 9RS  
Tel: +44 (0) 845 850 9900  
Email: [RCustomerServicesUK@rs-components.com](mailto:RCustomerServicesUK@rs-components.com)  
Website: [www.rs-online.com](http://www.rs-online.com)

##### Ireland

RS Components Ltd  
Glenview Industrial Estate  
Herberton Road  
Rialto  
Dublin 12  
Tel: +353 (0) 1 415 3100  
Email: [Enquiries.ie@rs-components.com](mailto:Enquiries.ie@rs-components.com)  
Website: [www.rs-online.com](http://www.rs-online.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.

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS08

GHS09

Signal word (CLP) : Warning

# RS-GCS-014-SM4 SILICONE THERMAL GREASE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazardous ingredients	: 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. P391 - Collect spillage. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 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]
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	10 - 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. Abdominal pain, nausea.

### 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.

# RS-GCS-014-SM4 SILICONE THERMAL GREASE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 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

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### CARBON BLACK MESOPOROUS (1333-86-4)

Germany	TRGS 910 Acceptable concentration notes	
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	3.5 mg/m <sup>3</sup>
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE

#### ZINC OXIDE (1314-13-2)

EU	Local name	Zinc oxide
EU	Notes	(Ongoing)
EU	Regulatory reference	SCOEL Recommendations
Germany	TRGS 910 Acceptable concentration notes	

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protective equipment:

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

#### Materials for protective clothing:

Condition	Material	Standard
Less resistance:	Polyethylene	

#### Hand protection:

Protective gloves

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

#### Eye protection:

Safety glasses

Type	Use	Characteristics	Standard
Safety glasses	Dust, Droplet	With side shields	EN 166

#### Skin and body protection:

Wear suitable protective clothing

# RS-GCS-014-SM4 SILICONE THERMAL GREASE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Type	Standard
Disposable gowns, Disposable sleeves	

**Respiratory protection:**

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Air-Purifying Respirator (APR), disposable	Type P3	Dust protection, Vapour protection	EN 14387

### Personal protective equipment symbol(s):



### 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	: white.
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	: 2.2
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
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

## 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). No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition or combustion may generate smoke, carbon oxides (CO, CO<sub>2</sub>), and other products of incomplete combustion. Silicon oxides.

# RS-GCS-014-SM4 SILICONE THERMAL GREASE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 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 (mg/l)	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
------------	--------------------------------------

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

### 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.
Acute aquatic toxicity	: Very toxic to aquatic life.
Chronic aquatic toxicity	: Very toxic to aquatic life with long lasting effects.

#### 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 Daphnia 1	0.098 mg/l

#### 12.2. Persistence and degradability

#### CARBON BLACK MESOPOROUS (1333-86-4)

Persistence and degradability	Not established.
-------------------------------	------------------

#### 12.3. Bioaccumulative potential

#### CARBON BLACK MESOPOROUS (1333-86-4)

Bioaccumulative potential	No bioaccumulation data available.
---------------------------	------------------------------------

#### 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

# RS-GCS-014-SM4 SILICONE THERMAL GREASE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 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 / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
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.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

##### 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
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1

# RS-GCS-014-SM4 SILICONE THERMAL GREASE

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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.

SDS EU (REACH Annex II)

*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*