Regulation EC Nr. 1907/2006 Art.31

Date:

March 31<sup>st</sup>, 2022

**Document Nr.:** SDS0064001007-01 **Version:** 1.0

# Section 1: Identification of the substance or mixture and the company

#### 1.1. Product Identifier

Micro-Tec CSG7 conductive silver grease

**Product name:** Micro-Tec CSG7 conductive silver grease

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

Against electrostatic charge, lubricating and sealing of vacuum feedthroughs

Avoid extreme uses that could result in aerosolisation

## 1.3. Details of the supplier of the Safety Data Sheet

Vof Micro to Nano Tappersweg 91 2031ET Haarlem Netherlands

Tel: +31(0)85-2013155 E: info@microtonano.com

### 1.4 Emergency telephone number

112 (NLD) or your national emergency telephone number for chemical spills, leaks, fires, exposures or accidents

# Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Physical: 1
Health: 1

**Environment:** 1 Chronic aquatic toxicity

Other hazards: None

### Classification according to Regulation EC Nr. 1272/2008

Not classified as hazardous



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### 2.2 Labeling elements

## Labelling accordance to Regulation EC Nr. 1272/2008

#### **Hazard pictogramm(s):**



Signal word: Warning

Hazard statement(s): H410: Very toxic to aquatic life with long lasting effects

**Precautionary statement(s)** 

**Prevention:** P 273: Avoid release to the environment

**Response:** P304+P340: If inhaled: Remove person to fresh air and keep comfortable for

breathing

P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove

contact lenses if easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical attention

P370+P378: In case of fire: Use alcohol resistant foam or protein foam for

extinction

P391: collect spillage

Storage:

**Disposal:** P501: Dispose of contents/container in accordance to local/regional/

national/international regulations

Supplemental hazard info: None

#### 2.3 Other hazards

Argyria Hazard: Prolonged or repeated exposure by ingestion or inhalation can cause irreversible blue-grey skin discoloration

# Section 3: Composition / information on components

## 3.1. Substances

Not applicable



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3.2 Mixtures

<ol> <li>CAS Nr</li> <li>EC Nr</li> <li>Index Nr</li> <li>REACH No</li> </ol>	% (weight)	Name	Classification according to directive 67/548/EEC [DSD]	Classification according to regulation Nr 1272/2008 [CLP]
7440-22-4 231-131-3 not available 01-2119555669-21-xxxx	61-67	silver	R52	Not applicable
63148-62-9 not available not available not available	30-34	polydimethylsiloxane		Not applicable
1333-86-4 215-609-9 not available 01-2119384822-32-xxxx	3-5	Carbon black bound in grease matrix. Not in respirable form		Not applicable

<sup>(\*</sup> Explanation notes: see section 16)

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Contact with eyes:** Rinse cautiously with water for several minutes. If possible, remove contact

lenses. Continue rinsing.

Seek medical attention if irritation persists.

Contact with skin: Wash with water and soap.

Inhalation: Fresh air, keep warm and at rest.

Ingestion: If swallowed, do not induce vomiting

Get medical advice/attention if feeling unwell

### 4.2. Important symptoms and effects, either immediate or delayed

Inhalation:None known or expectedIngestion:None known or expectedSkin contact:None known or expected



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**Eye contact:** Mild irritation, mechanical irritation

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

**General advise:** If you feel unwell, seek medical advice; show product label if possible

If symptoms persist, always call a doctor

# Section 5: Firefighting Measures

## 5.1. Extinguishing media

Use inert dry powders or sand - Do not use water, CO2 or Foam

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides (CO, CO2), SiO2 and formaldehyde

#### 5.3 Advice to firefighters

Wear self-contained breathing apparatus for fire fighting

# Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Wear suitable protective clothing including eye/face protection

#### 6.2 Environmental precautions

Avoid release to the environment

Do not allow to enter public sewers and waterways

## 6.3 Methods and material for containment and clean up

Collect spillage, absorbed spillage and wipes in a suitable waste container Wash spill area with soap and water to remove last traces of residue

#### 6.4 Reference to other sections

For further information see section 8



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# Section 7: Handling and storage

## 7.1. Precautions for safe handling

Ensure adequate ventilation Avoid contact with skin and eyes Wash thoroughly after use

Wear protective gloves/protective clothing/eye protection/face protection

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed, in a cool, well-ventilated place Keep away from acids, hydrogen peroxide, ammonia and acetylene Keep out of reach of children

## 7.3 Specific end uses(s)

Against electro-static charge Lubricating for moving parts Vacuum sealant for moving parts and feedthroughs

# Section 8: Exposure control and personal protection

#### 8.1. Control parameters

#### **Exposure limits**

#### Occupational exposure limits (OEL)

Ingredient	Material Name	Source	TWA	STEL	Peak	Notes
Silver flakes	Silver (metal) Ag	UK	0.1mg/m3	Not available	Not available	Not available
carbon black	Carbon black	UK	3.5mg/m3	7mg/m3	Not available	Not available

#### 8.2 Exposure controls

**Control procedures:** Ensure adequate ventilation

Personal protection: Take precautions to avoid contact with eyes and skin when handling the products

Ensure adequate ventilation

**Inhalation:** If exposed to mist, wear oil resistant or oil proof particulate respirators

**Hands and skin:** Wear suitable gloves against chemicals; recommended gloves:

Nitrile

**Eyes:** Wear safety goggles or full face protection



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# Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Appearance/physical state:** Free-flowing paste **Colour:** Silvery, dark gray

Odour: None

pH not applicable
Boiling point/range: >200°C
Flash point: >300°C
Evaporation rate: <1

**Explosion limits: upper limit:** Not available

lower limit: Not available

Vapour pressure: 0.13 Kpa

Relative density: 2.29 g/cm3 @ 20°C

Solubility in water: Insoluble
Auto-ignition: Not available
Viscosity: >20.5 cSt

#### 9.2 Other information

Not Available

# Section 10: Stability and reactivity

#### 10.1. Reactivity

Reacts with acids to form flammable hydrogen gas
Reacts violently with hydrogen peroxides to form oxygen gas
Reaction with ammonia may form explosives compounds when dry
Reacts with acetylene to form shock-sensitive compounds

## 10.2 Chemical stability

Stable at normal temperatures and pressures

### 10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purposes



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### 10.4 Conditions to avoid

Excessive heat and incompatible substances

### 10.5 Incompitable materials

Strong oxidising agents, strong acids, strong bases, ammonia, acetylene, hydrogen peroxide

### 10.6 Hazardous decomposition products

Will not decompose under normal conditions. Thermal decomposition products are Carbon oxides (CO, CO2), SiO2 and formaldehyde

## Section 11: Toxicological information

## 11.1. Information on toxicological effects

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#### Information on likely routes of exposure:

Inhalation: No known significant effectsSkin contact: No known significant effects

**Eye contact:** May cause mild eye irritation, redness

### **Toxicological data:**

Ingredient	Toxicity	Irritation	
Silver, metal	Dermal (rat) LD50: >2000 mg/kg	Not available	
	Inhalation (rat) LC50: >5.16 mg/14h		
	Oral (rat) LD50: >2000 mg/kg		
Polydimethylsiloxane	Dermal (rabbit) LD50: >3000mg/kg	Eye (rabbit): 100mg/1h - mild	
	Oral (rat) LD50: >8000 mg/kg		
Carbon black	Dermal (rabbit) LD50: >3000mg/kg	Not available	
	Oral (rat) LD50: >8000 mg/kg		
Micro-Tec CSG7 conductive silver grease	Not available	Not available	



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# Section 12: Ecological information

### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects

## 12.2 Persistence and degradability

No information available

#### 12.3 Bioaccumulative potential

No information available

## 12.4 Mobility in soil

Insoluble in water

## 12.5 Results of PBT and vPvB assessment

No information available

### 12.6 Hazardous decomposition products

No experimental data available

# Section 13: Disposal considerations

#### 13.1. Waste treatment methods

**Product:** This material and its container must be disposed of in a safe way.

Containers may still present a chemical hazard when empty

Do not discharge into drains or the environment, dispose to an authorised waste

collection point.

**National regulations:** Disposal should be in accordance with local, state or national legislation.



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# Section 14: Transport information

### Labels required:



#### 14.1. UN number

UN-number: 3077

## 14.2 UN proper shipping name

**Proper shipping name:** Environmentally hazardous substance, solid, N.O.S.,

(silver powder)

### 14.3 Transport hazard class(es)

Class: 9
ADR/RID-Classification code: F1

## 14.4 Packing group

Packing: III
Limited Quantity 5L

### 14.5 Incompatable materials

ADR/RID- Environmentally hazardous: Not applicable

IMDG-Marine poluttant: yes

IATA/ICAO-Environmentally hazardous: No relevant data

## 14.6 Special precautions for user

No further information available

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

Not applicable



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# Section 15: Regulatory information

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

UN-number: 3077

#### 15.2 Chemical safety assessment

No information available

## Section 16: Other information

#### **RoHS Directive Compliant**

This product is fully compliant with the directive 2100/65/EU Annex II (RoHS). It does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's or PBDE's.

#### WEEE

This product is not a piece of electrical or electronic equipment, and it therefore not governed by Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)

#### Abbreviations:

Asp. Tox Aspiration hazard
Carc. Carcinogenicity
Exp. Exposure
Flam. Flammable

GHS Global Harmonised System of Classification of Labelling Chemicals

Irrit. Irritant

LC50 Lethal Concentration 50%

LCLo Lowest published lethal concentration

LD50 Lethal Dose 50% N/A Not applicable N/E Not estimated

PBT Persistent Bioaccumulative and Toxic

WEL Workplace Exposure Limit
Repr. Reproductive toxitant

ROHS Restriction of Hazardous Substance
SEM Scanning Electron Microscope
STEL Short-Term Exposure Limit
STOT Specific Target Organ Toxicity

TCLo Lowest published toxic concentration vPvB very Persistent and very Bioaccumulative WEEE Waste Electrical and Electronic Equipment



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#### **DSD / DPD label elements**



Product name: Micro-Tec CSG7 conductive silver grease

#### **Full Text Risk and Hazard codes**

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

H411 – Toxic to aquatic life with long lasting effects

#### Safety advice:

S02 – Keep out of reach of children.

S09 – Keep container in a well ventilated place.

S13 – Keep away from food, drink and animal feeding stuff.

S26 – In case of contact with eyes, rinse with plenty of water and seek medical help.

S281 – After contact with skin, wash immediately with detergent and plenty of waterways.

S29 – Do not empty in drains.

S35 – This materials and its container must be disposed of in a safe way.

S36 – Wear suitable protective clothing.

S37 – Wear suitable gloves.

S38 – In case of insufficient ventilation, wear suitable respiratory equipment.

S39 - Wear eye / face protection.

S45 – In case of accident or if you feel unwell, immediately contact Doctor or Poisons information center (show label if possible).

S46 – If swallowed, seek immediate medical advice and show label if possible.

S56 – Dispose of this materials and its container at hazardous or special waste collection point.

S57 – Use appropriate container to avoid environment contamination.

S61 – Avoid release to the environment

S63 – In case of accident by inhalation, remove casualty to fresh air and keep at rest.

S64 – If swallowed, rinse mouth with water (only if person is conscious)

This product should be stored, handled, and used in accordance with good industrial hygiene practices and in accordance with any legal regulation.

The information contained herewith is based on the present state of our knowledge and is intended to describe the product from the point of view of safety requirements. It does not guarantee any specific properties.

It is the responsibility of the user to query and verify any information seeming suspect or where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, state, federal and international regulations.



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