# CV-9341

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010

Revision date: 06/04/2016 | Date of issue: 01/01/2013 | Version: 2.1

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

### 1.1. Product identifier

Product form : Mixture

Product Name : CV-9341

Synonyms : Thermally Conductive, Controlled Volatility Silicone Grease

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : For high thermal conductivity, high and low temperature stability and low bleed. For professional use only.

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

NuSil Technology LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
ehs@nusil.com
www.nusil.com

### 1.4. Emergency telephone number

Emergency number : 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Full text of hazard classes and H-statements : see section 16

**Adverse physicochemical, human health and environmental effects**

No additional information available

### 2.2. Label elements

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

Hazard pictograms (CLP) :

GHS09

Signal word (CLP) : Warning

Hazard statements (CLP) : H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P273 - Avoid release to the environment
P391 - Collect spillage
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations

### 2.3. Other Hazards

Other hazards not contributing to the classification : Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

# SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Zinc oxide | (CAS No) 1314-13-2<br>(EC no) 215-222-5<br>(EC index no) 030-013-00-7 | 70 - 75 | Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 |

Full text of H-statements: see section 16

# SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : When symptoms occur: go into open air and ventilate suspected area. Keep at rest and in a position comfortable for breathing.

First-aid measures after skin contact : Remove contaminated clothing. Gently wash with plenty of soap and water. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/injuries after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/injuries after skin contact : Contact during a long period may cause slight irritation.

Symptoms/injuries after eye contact : Repeated or prolonged contact will cause mechanical irritation.

Symptoms/injuries after ingestion : Ingestion may cause nausea, vomiting and diarrhea.

Chronic symptoms : None expected under normal conditions of use.

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

If you feel unwell, seek medical advice (show the label where possible).

# SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

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

Fire hazard : Not considered flammable but will burn at high temperatures.

Explosion hazard : Product is not explosive.

Reactivity : Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for firefighters

Precautionary measures fire : Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Refer to Section 9 for flammability properties.

## SECTION 6: Accidental release measures

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

General measures : Avoid contact with skin, eyes and clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For non-emergency personnel

Protective equipment : Use appropriate personal protection equipment (PPE).

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area. Stop leak if safe to do so.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Absorb and/or contain spill with inert material, then place in suitable container.

Methods for cleaning up : Clean up spills immediately and dispose of waste safely.

### 6.4. Reference to other sections

See heading 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

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

Technical measures : Comply with applicable regulations.

Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible products : Strong acids. Strong oxidizers. Strong bases.

### 7.3. Specific end use(s)

For high thermal conductivity, high and low temperature stability and low bleed. For professional use only.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| **Zinc oxide (1314-13-2)** | | |
|---|---|---|
| Austria | MAK (mg/m³) | 5 mg/m³ (respirable fraction, smoke) |

| **Zinc oxide (1314-13-2)** | | |
|---|---|---|
| Belgium | Limit value (mg/m³) | 10 mg/m³ (dust)<br>5 mg/m³ (fume)<br>5 mg/m³ (aerosol and vapor) |
| Belgium | Short time value (mg/m³) | 10 mg/m³ (fume)<br>10 mg/m³ (aerosol and vapor) |
| Bulgaria | OEL TWA (mg/m³) | 5,0 mg/m³ |
| Bulgaria | OEL STEL (mg/m³) | 10,0 mg/m³ |
| Croatia | GVI (granična vrijednost izloženosti) (mg/m³) | 5 mg/m³ |
| Croatia | KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³) | 10 mg/m³ |
| France | VME (mg/m³) | 5 mg/m³ (fume)<br>10 mg/m³ (dust) |
| Greece | OEL TWA (mg/m³) | 5 mg/m³ (fume) |
| Greece | OEL STEL (mg/m³) | 10 mg/m³ (fume) |
| USA ACGIH | ACGIH TWA (mg/m³) | 2 mg/m³ (respirable fraction) |
| USA ACGIH | ACGIH STEL (mg/m³) | 10 mg/m³ (respirable fraction) |
| Latvia | OEL TWA (mg/m³) | 0,5 mg/m³ |
| Spain | VLA-ED (mg/m³) | 2 mg/m³ (respirable fraction) |
| Spain | VLA-EC (mg/m³) | 10 mg/m³ |
| Switzerland | VLE (mg/m³) | 3 mg/m³ (respirable dust, smoke) |
| Switzerland | VME (mg/m³) | 3 mg/m³ (respirable dust, smoke) |
| Czech Republic | Expoziční limity (PEL) (mg/m³) | 2 mg/m³ |
| Denmark | Grænseværdie (langvarig) (mg/m³) | 4 mg/m³<br>4 mg/m³ (fume) |
| Estonia | OEL TWA (mg/m³) | 5 mg/m³ |
| Finland | HTP-arvo (8h) (mg/m³) | 2 mg/m³ (fume) |
| Finland | HTP-arvo (15 min) | 10 mg/m³ (fume) |
| Hungary | AK-érték | 5 mg/m³ (respirable dust) |
| Hungary | CK-érték | 20 mg/m³ (respirable dust) |
| Ireland | OEL (8 hours ref) (mg/m³) | 2 mg/m³ (fume) |
| Ireland | OEL (15 min ref) (mg/m3) | 10 mg/m³ (fume) |
| Lithuania | IPRV (mg/m³) | 5 mg/m³ |
| Norway | Grenseverdier (AN) (mg/m³) | 5 mg/m³ |
| Norway | Grenseverdier (Korttidsverdi) (mg/m3) | 10 mg/m³ |
| Poland | NDS (mg/m³) | 5 mg/m³ (inhalable fraction) |
| Poland | NDSCh (mg/m³) | 10 mg/m³ (inhalable fraction) |
| Romania | OEL TWA (mg/m³) | 5 mg/m³ (fume) |
| Romania | OEL STEL (mg/m³) | 10 mg/m³ (fume) |
| Slovakia | NPHV (priemerná) (mg/m³) | 1 mg/m³ (fume) |
| Slovakia | NPHV (Hraničná) (mg/m³) | 1 mg/m³ |
| Slovenia | OEL TWA (mg/m³) | 5 mg/m³ (respirable fraction, fume) |
| Slovenia | OEL STEL (mg/m³) | 20 mg/m³ (respirable fraction, fume) |
| Sweden | nivågränsvärde (NVG) (mg/m³) | 5 mg/m³ (total dust) |
| Portugal | OEL TWA (mg/m³) | 2 mg/m³ (respirable fraction) |

| **Zinc oxide (1314-13-2)** | | |
|---|---|---|
| Portugal | OEL STEL (mg/m³) | 10 mg/m³ (respirable fraction) |

### 8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal protective equipment : Protective goggles. Gloves. Protective clothing.

Materials for protective clothing : Chemically resistant materials and fabrics.

Hand protection : Wear chemically resistant protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Environmental exposure controls : Do not allow the product to be released into the environment.

Consumer exposure controls : Do not eat, drink or smoke during use.

## 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 | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : > 275 °C (> 527 °F) |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative Density | : 2,3 (water = 1) |
| Solubility | : Insoluble in water. |
| Partition coefficient: n-octanol/water | : 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

VOC content : < 1 %

# SECTION 10: Stability and reactivity

### 10.1. Reactivity
Hazardous reactions will not occur under normal conditions.

### 10.2. Chemical stability
Stable at standard temperature and pressure.

### 10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

### 10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

### 10.5. Incompatible materials
Strong acids. Strong oxidizers. Strong bases.

### 10.6. Hazardous decomposition products
Carbon oxides (CO, $CO_2$). Silicon oxides. Zinc oxide.

# SECTION 11: Toxicological information

### 11.1. Information on toxicological effects
Acute toxicity : Not classified

| **Zinc oxide (1314-13-2)** | |
|---|---|
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified

# SECTION 12: Ecological information

### 12.1. Toxicity
Ecology - general : Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

| **Zinc oxide (1314-13-2)** | |
|---|---|
| LC50 fish 1 | 780 µg/l (Exposure time: 96 h - Species: Pimephales promelas) |
| EC50 Daphnia 1 | 0,122 mg/l |
| NOEC chronic fish | 0,026 mg/l (Species: Jordanella floridae) |

### 12.2. Persistence and degradability

| **CV-9341** | |
|---|---|
| Persistence and degradability | Not established. |

### 12.3. Bioaccumulative potential

| **CV-9341** | |
|---|---|
| Bioaccumulative potential | Not established. |

### 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

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Sewage disposal recommendations : Do not empty into drains; dispose of this material and its container in a safe way.

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology - waste materials : This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: Transport information

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

### 14.1. UN number

UN-No. (ADR) : 3082

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc oxdide)

Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (E)

### 14.3. Transport hazard class(es)

Class (ADR) : 9

Danger labels (ADR) : 9

### 14.4. Packing group

Packing group (ADR) : III

### 14.5. Environmental hazards

Dangerous for the environment :

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90

Classification code (ADR) : M6

Orange plates :


Special provisions (ADR) : 274, 335, 601, 375

Transport category (ADR) : 3

Tunnel restriction code (ADR) : E

Limited quantities (ADR) : 5l

Excepted quantities (ADR) : E1

EAC code : •3Z

**14.6.2. Transport by sea**

EmS-No. (1) : F-A
MFAG-No : 171
EmS-No. (2) : S-F

**14.6.3. Air transport**

No additional information available

**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
VOC content : < 1 %

**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

Indication of changes:

| Section | Section Header | Change | Date Changed |
|---|---|---|---|
| 1.3 | Details of the supplier of the safety data sheet | Modified | 06/04/2016 |
| 2 | Hazards identification | Removed DSD/DPD information. | 06/04/2016 |
| 3 | Composition/information on ingredients | Removed not classified components and components below cutoffs. Removed DSD/DPD information. | 06/04/2016 |
| 15.1.1 | EU-Regulations | Modified | 06/04/2016 |

Revision date : 06/04/2016
Data sources : According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010

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 |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |

Nusil EU GHS SDS

*We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of NuSil Technology, it is the user's obligation to determine the conditions of safe use of the product.*

Polymer Systems Technology Limited

# Silicone Sales & Services
# UK - Ireland - Benelux



Unit 2. Network 4. Cressex Business Park,
Lincoln Road, High Wycombe, Bucks. HP12 3RF

tel: +44 (0) 1494 446610

web: https://www.silicone-polymers.com

email: sales@silicone-polymers.co.uk