SAFETY DATA SHEET

1. Identification

Product identifier Dielectric Grease Compound

Other means of identification

No. 02085 (Item# 1003199) **Product Code**

Recommended use Lubricates, protects and insulates electrical connections

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

CRC Industries. Inc. Company name

885 Louis Dr. **Address**

Warminster, PA 18974 US

Telephone

215-674-4300 **General Information Technical Assistance** 800-521-3168 **Customer Service** 800-272-4620 24-Hour Emergency 800-424-9300 (US)

(CHEMTREC) 703-527-3887 (International) Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards Gases under pressure

Health hazards Not classified. Not classified. **Environmental hazards OSHA** defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Contains gas under pressure; may explode if heated.

Precautionary statement

Prevention Do not puncture or incinerate container. Do not expose to heat or store at temperatures above

> 49°C/120°F. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. Observe good industrial hygiene

Compressed gas

practices.

Response Wash hands after handling.

Storage Protect from sunlight. Store in a well-ventilated place. Exposure to high temperature may cause

can to burst.

Disposal Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information

When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.

3. Composition/information on ingredients

Mixtures

Material name: Dielectric Grease Compound

| Chemical name | Common name and synonyms | CAS number | % |
|-------------------------|--------------------------|-------------|---------|
| polydimethylsiloxane | | 63148-62-9 | 80 - 90 |
| amorphous fumed silica | | 112945-52-5 | 5 - 10 |
| nitrogen | | 7727-37-9 | 1 - 3 |
| polytetrafluoroethylene | | 9002-84-0 | 1 - 3 |

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Direct contact with eyes may cause temporary irritation.

Rinse with water. Get medical attention if irritation develops and persists. Eve contact

Ingestion If swallowed, do NOT induce vomiting. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed

General information

Provide general supportive measures and treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire-fighting equipment/instructions General fire hazards

Water spray. Foam. Dry chemical powder. Carbon dioxide (CO2).

None known.

During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.

Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Wipe up with absorbent material (e.g. cloth, fleece, vermiculite). Sweep up or vacuum up spillage and collect in suitable container for disposal. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. For product usage instructions, see the product label.

Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components **Type** Value **TWA** amorphous fumed silica 0.8 mg/m3 (CAS 112945-52-5)

20 mppcf

US. NIOSH: Pocket Guide to Chemical Hazards Components

Value **TWA** 6 mg/m3 amorphous fumed silica

(CAS 112945-52-5) **Biological limit values**

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves such as: Nitrile. Wear suitable protective clothing. Other

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a Respiratory protection

NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to

determine actual employee exposure levels.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Aerosol, Paste. Off-white. Color Odor Mild.

Odor threshold Not available. Not available. Melting point/freezing point > 572 °F (> 300 °C)

Initial boiling point and boiling

range

> 392 °F (> 200 °C)

> 572 °F (> 300 °C) Cleveland Open Cup Flash point

Evaporation rate Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Material name: Dielectric Grease Compound

Flammability limit - upper

(%)

Not available.

Vapor pressure 156152.2 hPa estimated

Vapor density > 1 (air = 1)

Relative density 0.97
Solubility (water) Insoluble.

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature> 572 °F (> 300 °C)Decomposition temperature> 302 °F (> 150 °C)

Viscosity (kinematic) Not available.

Percent volatile < 2 %

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Heat, flames and sparks. Avoid temperatures exceeding the decomposition temperature. When

exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive

gases such as hydrogen fluoride. Contact with incompatible materials.

Incompatible materials Fluorine. Chlorine.

Hazardous decomposition

products

 $Hydrogen\ fluoride.\ Perfluoroisobutylene.\ Perfluorinated\ acid\ fluorides.\ Formaldehyde.\ Silicone$

dioxide. Traces of incompletely burned carbon compounds.

11. Toxicological information

Information on likely routes of exposure

Inhalation Inhalation of fumes may result in metal fume fever, a flu-like illness with symptoms of metallic

taste, fever and chills, aches, chest tightness, and cough.

Skin contactProlonged skin contact may cause temporary irritation.Eye contactDirect contact with eyes may cause temporary irritation.IngestionHealth injuries are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components Species Test Results

amorphous fumed silica (CAS 112945-52-5)

Acute Oral

LD50 Rat > 5000 mg/kg

polydimethylsiloxane (CAS 63148-62-9)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

Oral

LD50 Rat > 10000 mg/kg

polytetrafluoroethylene (CAS 9002-84-0)

<u>Acute</u>

Oral

LD50 Rat > 10000 mg/kg

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

amorphous fumed silica (CAS 112945-52-5)
3 Not classifiable as to carcinogenicity to humans.
polytetrafluoroethylene (CAS 9002-84-0)
3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not expected to be an aspiration hazard.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

amorphous fumed silica (CAS 112945-52-5)

Aquatic Acute

Fish LC50 Zebra danio (Danio rerio) > 10000 mg/l, 96 hours

polydimethylsiloxane (CAS 63148-62-9)

Aquatic

Fish LC50 Channel catfish (Ictalurus punctatus) 2.36 - 4.15 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal of waste from residues / unused products

This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste

containers may be recycled. Collect and reciain or dispose in sealed containers at licensed waste

disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose in

accordance with all applicable regulations.

Hazardous waste code Not regulated.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN number UN1950

UN proper shipping name Transport hazard class(es) Aerosols, non-flammable, Limited Quantity

Class 2.2

Material name: Dielectric Grease Compound

ط

^{*} Estimates for product may be based on additional component data not shown.

Subsidiary risk -Label(s) 2.2

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging exceptions 306
Packaging non bulk None
Packaging bulk None

IATA

UN number UN1950

UN proper shipping name Aerosols, non-flammable, Limited Quantity

Transport hazard class(es)

Class 2.2 Subsidiary risk -

Packing group Not applicable.

ERG Code 21

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1950

UN proper shipping name AEROSOLS, Limited Quantity

Transport hazard class(es)

Class 2

Subsidiary risk -

Packing group Not applicable.

Environmental hazards

Marine pollutant No.

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

SARA 304 Emergency release notification

Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

polytetrafluoroethylene (CAS 9002-84-0) Long-Chain Perfluorinated Chemicals (PFCs) Action Plan

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

CERCLA Hazardous Substances: Reportable quantity

Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Material name: Dielectric Grease Compound

SDS US

Safe Drinking Water Act

(SDWA)

Not regulated.

(SDWA)

Food and Drug

Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Immediate Hazard - No
Hazard categories Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - Yes

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

US state regulations

US. New Jersey Worker and Community Right-to-Know Act

No

Not listed.

US. Massachusetts RTK - Substance List

amorphous fumed silica (CAS 112945-52-5)

US. Pennsylvania Worker and Community Right-to-Know Law

amorphous fumed silica (CAS 112945-52-5) polytetrafluoroethylene (CAS 9002-84-0)

US. Rhode Island RTK

polytetrafluoroethylene (CAS 9002-84-0)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR

51.100(s))

Consumer products

Not regulated

< 1 %

(40 CFR 59, Subpt. C)

State

VOC content (CA) < 1 %

VOC content (OTC) < 1 %

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

 Issue date
 06-25-2015

 Revision date
 10-16-2017

Material name: Dielectric Grease Compound

No. 02085 (Item# 1003199) Version #: 02 Revision date: 10-16-2017 Issue date: 06-25-2015

Prepared by Allison Yoon

Version # 02

Further information Not available.

HMIS® ratings Health: 1

Flammability: 1 Physical hazard: 0 Personal protection: B

NFPA ratings Health: 1

Flammability: 1 Instability: 0

NFPA ratings



Disclaimer

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

Revision Information

Product and Company Identification: Product Codes Composition / Information on Ingredients: Ingredients

Composition/information on ingredients: Component information Fire-fighting measures: Specific hazards arising from the chemical

Handling and storage: Precautions for safe handling Physical & Chemical Properties: Multiple Properties

Stability and reactivity: Conditions to avoid

Toxicological information: Respiratory sensitization

Transport Information: Proper Shipping Name/Packing Group

Other information, including date of preparation or last revision: Disclaimer

GHS: Classification

Material name: Dielectric Grease Compound

SAFETY DATA SHEET

1. Identification

Product identifier Dielectric Grease Compound

Other means of identification

No. 02085 (Item# 1003199) **Product Code**

Recommended use Lubricates, protects and insulates electrical connections

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

CRC Industries. Inc. Company name

885 Louis Dr. **Address**

Warminster, PA 18974 US

Telephone

215-674-4300 **General Information Technical Assistance** 800-521-3168 **Customer Service** 800-272-4620 24-Hour Emergency 800-424-9300 (US)

(CHEMTREC) 703-527-3887 (International) Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards Gases under pressure

Health hazards Not classified. Not classified. **Environmental hazards OSHA** defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Contains gas under pressure; may explode if heated.

Precautionary statement

Prevention Do not puncture or incinerate container. Do not expose to heat or store at temperatures above

> 49°C/120°F. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. Observe good industrial hygiene

Compressed gas

practices.

Response Wash hands after handling.

Storage Protect from sunlight. Store in a well-ventilated place. Exposure to high temperature may cause

can to burst.

Disposal Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information

When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.

3. Composition/information on ingredients

Mixtures

Material name: Dielectric Grease Compound

| Chemical name | Common name and synonyms | CAS number | % |
|-------------------------|--------------------------|-------------|---------|
| polydimethylsiloxane | | 63148-62-9 | 80 - 90 |
| amorphous fumed silica | | 112945-52-5 | 5 - 10 |
| nitrogen | | 7727-37-9 | 1 - 3 |
| polytetrafluoroethylene | | 9002-84-0 | 1 - 3 |

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Direct contact with eyes may cause temporary irritation.

Rinse with water. Get medical attention if irritation develops and persists. Eve contact

Ingestion If swallowed, do NOT induce vomiting. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed

General information

Provide general supportive measures and treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire-fighting equipment/instructions General fire hazards

Water spray. Foam. Dry chemical powder. Carbon dioxide (CO2).

None known.

During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers.

Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Wipe up with absorbent material (e.g. cloth, fleece, vermiculite). Sweep up or vacuum up spillage and collect in suitable container for disposal. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. For product usage instructions, see the product label.

Level 1 Aerosol.

Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in tightly closed original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components **Type** Value **TWA** amorphous fumed silica 0.8 mg/m3 (CAS 112945-52-5)

20 mppcf

US. NIOSH: Pocket Guide to Chemical Hazards Components

Value **TWA** 6 mg/m3 amorphous fumed silica

(CAS 112945-52-5) **Biological limit values**

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves such as: Nitrile. Wear suitable protective clothing. Other

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a Respiratory protection

NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to

determine actual employee exposure levels.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Aerosol, Paste. Off-white. Color Odor Mild.

Odor threshold Not available. Not available. Melting point/freezing point > 572 °F (> 300 °C)

Initial boiling point and boiling

range

> 392 °F (> 200 °C)

> 572 °F (> 300 °C) Cleveland Open Cup Flash point

Evaporation rate Not available. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Material name: Dielectric Grease Compound

Flammability limit - upper

(%)

Not available.

Vapor pressure 156152.2 hPa estimated

Vapor density > 1 (air = 1)

Relative density 0.97
Solubility (water) Insoluble.

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature> 572 °F (> 300 °C)Decomposition temperature> 302 °F (> 150 °C)

Viscosity (kinematic) Not available.

Percent volatile < 2 %

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Heat, flames and sparks. Avoid temperatures exceeding the decomposition temperature. When

exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive

gases such as hydrogen fluoride. Contact with incompatible materials.

Incompatible materials Fluorine. Chlorine.

Hazardous decomposition

products

 $Hydrogen\ fluoride.\ Perfluoroisobutylene.\ Perfluorinated\ acid\ fluorides.\ Formaldehyde.\ Silicone$

dioxide. Traces of incompletely burned carbon compounds.

11. Toxicological information

Information on likely routes of exposure

Inhalation Inhalation of fumes may result in metal fume fever, a flu-like illness with symptoms of metallic

taste, fever and chills, aches, chest tightness, and cough.

Skin contactProlonged skin contact may cause temporary irritation.Eye contactDirect contact with eyes may cause temporary irritation.IngestionHealth injuries are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components Species Test Results

amorphous fumed silica (CAS 112945-52-5)

Acute Oral

LD50 Rat > 5000 mg/kg

polydimethylsiloxane (CAS 63148-62-9)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

Oral

LD50 Rat > 10000 mg/kg

polytetrafluoroethylene (CAS 9002-84-0)

<u>Acute</u>

Oral

LD50 Rat > 10000 mg/kg

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

amorphous fumed silica (CAS 112945-52-5)
3 Not classifiable as to carcinogenicity to humans.
polytetrafluoroethylene (CAS 9002-84-0)
3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not expected to be an aspiration hazard.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components Species Test Results

amorphous fumed silica (CAS 112945-52-5)

Aquatic Acute

Fish LC50 Zebra danio (Danio rerio) > 10000 mg/l, 96 hours

polydimethylsiloxane (CAS 63148-62-9)

Aquatic

Fish LC50 Channel catfish (Ictalurus punctatus) 2.36 - 4.15 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal of waste from residues / unused products

This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste

containers may be recycled. Collect and reciain of dispose in sealed containers at licensed w

disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose in

accordance with all applicable regulations.

Hazardous waste code Not regulated.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

14. Transport information

DOT

UN number UN1950

UN proper shipping name Transport hazard class(es) Aerosols, non-flammable, Limited Quantity

Class 2.2

Material name: Dielectric Grease Compound

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^{*} Estimates for product may be based on additional component data not shown.

Subsidiary risk -Label(s) 2.2

Packing group Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Packaging exceptions 306
Packaging non bulk None
Packaging bulk None

IATA

UN number UN1950

UN proper shipping name Aerosols, non-flammable, Limited Quantity

Transport hazard class(es)

Class 2.2 Subsidiary risk -

Packing group Not applicable.

ERG Code 2L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

rasseliger and cargo

aircraft Cargo aircraft only Allowed with restrictions.

Allowed with restrictions.

IMDG

UN number UN1950

UN proper shipping name AEROSOLS, Limited Quantity

Transport hazard class(es)

Class 2

Subsidiary risk -

Packing group Not applicable.

Environmental hazards

Marine pollutant No.

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

SARA 304 Emergency release notification

Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

polytetrafluoroethylene (CAS 9002-84-0) Long-Chain Perfluorinated Chemicals (PFCs) Action Plan

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

CERCLA Hazardous Substances: Reportable quantity

Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Material name: Dielectric Grease Compound

SDS US

Safe Drinking Water Act

(SDWA)

Not regulated.

(SDWA)

Food and Drug

Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Immediate Hazard - No
Hazard categories Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - Yes

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

US state regulations

US. New Jersey Worker and Community Right-to-Know Act

No

Not listed.

US. Massachusetts RTK - Substance List

amorphous fumed silica (CAS 112945-52-5)

US. Pennsylvania Worker and Community Right-to-Know Law

amorphous fumed silica (CAS 112945-52-5) polytetrafluoroethylene (CAS 9002-84-0)

US. Rhode Island RTK

polytetrafluoroethylene (CAS 9002-84-0)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR

51.100(s))

Consumer products

(40 CFR 59, Subpt. C)

Not regulated

Inventory neme

< 1 %

State

VOC content (CA) < 1 %

VOC content (OTC) < 1 %

International Inventories

Country/o) or region

| Country(s) or region | inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

 Issue date
 06-25-2015

 Revision date
 10-16-2017

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On inventory (veelse)*

Prepared by Allison Yoon

Version # 02

Further information Not available.

HMIS® ratings Health: 1

Flammability: 1 Physical hazard: 0 Personal protection: B

NFPA ratings Health: 1

Flammability: 1 Instability: 0

NFPA ratings



Disclaimer

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries, Inc..

Revision Information

Product and Company Identification: Product Codes Composition / Information on Ingredients: Ingredients

Composition/information on ingredients: Component information Fire-fighting measures: Specific hazards arising from the chemical

Handling and storage: Precautions for safe handling Physical & Chemical Properties: Multiple Properties

Stability and reactivity: Conditions to avoid

Toxicological information: Respiratory sensitization

Transport Information: Proper Shipping Name/Packing Group

Other information, including date of preparation or last revision: Disclaimer

GHS: Classification

Material name: Dielectric Grease Compound