SAFETY DATA SHEET

1. Identification

Product identifier                  Technician Grade Dielectric Grease
Other means of identification      
Product code                        05113
Recommended use                    Lubricates, protects and insulates electrical connections
Recommended restrictions           None known.

Manufacturer/Importer/Supplier/Distributor information
Manufactured or sold by:
Company name                      CRC Industries, Inc.
Address                            885 Louis Dr.
                                    Warminster, PA 18974 US
Telephone                          
General Information                215-674-4300
Technical Assistance               800-521-3168
Customer Service                   800-272-4620
24-Hour Emergency (CHEMTREC)       800-424-9300 (US)
                                    703-527-3887 (International)
Website                            www.crcindustries.com

2. Hazard(s) identification

Physical hazards                   Gases under pressure
Health hazards                     Compressed gas
Environmental hazards              Not classified.
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 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: Technician Grade Dielectric Grease
05113 Version #: 01 Issue date: 06-25-2015

SDS US 1 / 8
### 4. First-aid measures

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

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

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

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

**Most important symptoms/effects, acute and delayed**
Direct contact with eyes may cause temporary irritation.

**Indication of immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically.

**General information**
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**
None known.

**Specific hazards arising from the chemical**
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, Perfluoroisobutylene and Perfluorinated acid fluorides.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**
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, please see the product label.
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. OSHA Table Z-3 (29 CFR 1910.1000)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>Amorphous fumed silica</td>
<td>TWA</td>
<td>0.8 mg/m³</td>
</tr>
<tr>
<td>(CAS 112945-52-5)</td>
<td></td>
<td>20 mppcf</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. NIOSH: Pocket Guide to Chemical Hazards</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td>Type</td>
<td>Value</td>
</tr>
<tr>
<td>Amorphous fumed silica</td>
<td>TWA</td>
<td>6 mg/m³</td>
</tr>
<tr>
<td>(CAS 112945-52-5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Other

Wear suitable protective clothing.

Respiratory protection

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a 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.
Color
Off-white.
Odor
Mild.
Odor threshold
Not available.
pH
Not available.
Melting point/freezing point
> 572 °F (> 300 °C)
Initial boiling point and boiling range
> 392 °F (> 200 °C)
Flash point
> 572 °F (> 300 °C) Cleveland Open Cup
Evaporation rate
Not available.
Flammability (solid, gas)
Not available.
Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.
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 %
Other information
Heat of combustion (NFPA 30B) 15.32 kJ/g estimated

10. Stability and reactivity

Reactivity The 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, Perfluoroisobutylene and Perfluorinated acid fluorides. Contact with incompatible materials.
Incompatible materials Fluorine. Chlorine.

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 contact Prolonged skin contact may cause temporary irritation.
Eye contact Direct contact with eyes may cause temporary irritation.
Ingestion Health 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 Not available.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technician Grade Dielectric Grease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>2318 mg/kg estimated</td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>9281 mg/kg estimated</td>
</tr>
</tbody>
</table>

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

Germ cell mutagenicity
No 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.

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.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technician Grade Dielectric Grease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>16.5892 mg/l, 96 hours estimated</td>
</tr>
<tr>
<td>Components</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amorphous fumed silica (CAS 112945-52-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td></td>
</tr>
<tr>
<td>Polydimethylsiloxane (CAS 63148-62-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td></td>
</tr>
</tbody>
</table>

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

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

Bioaccumulative potential
No data available.

Partition coefficient n-octanol / water (log Kow)
Nitrogen 0.67

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation 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 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 Aerosols, non-flammable, Limited Quantity
Transport hazard class(es)
Class 2.2
Subsidiary risk -
Label(s) 2.2
Material name: Technician Grade Dielectric Grease

05113 Version #: 01 Issue date: 06-25-2015

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.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

SARA 304 Emergency release notification
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.

Safe Drinking Water Act (SDWA)
Not regulated.
Food and Drug Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Section 311/312
Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - Yes
Reactivity Hazard - No
SARA 302 Extremely hazardous substance
No

US state regulations
US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. New Jersey Worker and Community Right-to-Know Act
Nitrogen (CAS 7727-37-9)

US. Massachusetts RTK - Substance List
Amorphous fumed silica (CAS 112945-52-5)
Nitrogen (CAS 7727-37-9)

US. Pennsylvania Worker and Community Right-to-Know Law
Amorphous fumed silica (CAS 112945-52-5)
Nitrogen (CAS 7727-37-9)
Polytetrafluoroethylene (CAS 9002-84-0)

US. Rhode Island RTK
None.

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)) < 1 %
Consumer products (40 CFR 59, Subpt. C) Not regulated

State
Consumer products Not regulated
VOC content (CA) < 1 %
VOC content (OTC) < 1 %

International Inventories

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

*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).
Material name: Technician Grade Dielectric Grease

05113  Version #: 01  Issue date: 06-25-2015

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

Issue date 06-25-2015
Prepared by Allison Cho
Version # 01
Further information Not available.
HMIS® ratings
- Health: 1
- Flammability: 1
- Physical hazard: 0
- Personal protection: B
NFPA ratings
- Health: 1
- Flammability: 1
- Instability: 0

Disclaimer
CRC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. 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 Industries’ 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.