SPI Supplies Division

Structure Probe, Inc. P.O. Box 656 West Chester, PA 19381-0656 USA Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755 spi3spi@2spi.com http://www.2spi.com Manufacturer's CAGE: 1P573 Section 1: Identification

Safety Data Sheet

Date Effective: March 6, 2013

SPI # 05050-BA, 05050-CF, 05050-FA, and 05050-XQ Braycote Micronic 1632 Vacuum Grease

Chemical Name/Synonyms......Castrol Braycote Micronic 1632 Vacuum Grease; Propene, 1, 1, 2, 3, 3, 3hexafluoro, oxidized, polymerized and

polytetrafluoroethylene

Chemical family.....Fluorocarbons, fluoropolymers

Manufacturer Castrol Industrial North America, Inc. 150 W. Warrenville Road Naperville, IL 60563

Supplier SPI-Chem[™] SPI Supplies Division Structure Probe, Inc. P.O. Box 656 West Chester, PA 19381-0656 USA Phone: 1-(610)-436-5400 Fax: 1-(610)-436-5755 E-mail: spi3spi@2spi.com WWW: http://www.2spi.com

Emergencies Contacting CHEMTREC:

24 Hour Emergency Use Only #'s... Worldwide phone: 1-(703)-527-3887 Worldwide FAX: 1-(703)-741-6090 Toll-free phone: 1-(800)-424-9300 USA only

Product or Trade Name......SPI # 05050-BA, 05050-CF, 05050-FA, and 05050-XQ Braycote Micronic 1632 Vacuum Grease

CAS #'s.....Mixture

Chemical Formula.....Not available

Conditions of Use

Hazardous Material Information System USA

Health	.1
Fire Hazard	.1
Physical Hazard	.0
Personal Protection	

NFPA Rating (estimated)

Health.....3 Flammability.....1 Reactivity.....0 Personal Protection.....

A NFPA health hazard rating of "3" is assigned due to toxicity of thermal decomposition products and fluorine (HF); otherwise, the material itself warrants a health hazard rating of "1".

GHS Classification None

Hazard Symbol(s)



Signal Word: Warning

Hazard Statement(s) H316: Causes mild skin irritation H320: Causes eye irritation H335: May cause respiratory irritation

Precautionary Statement(s)

P261: Avoid breathing dust/fume/gas/mist/vapours/spray

Section 2: Composition

This product does not contain any hazardous ingredients at or above regulated thresholds.

Section 3: Hazard Identification

Emergency overview: May cause respiratory tract, eye and skin irritation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

Routes of Entry: Dermal contact, Eye contact, Inhalation

Physical state: Grease

Color: Off-white

Odor: Odorless

Potential health effects

Eyes: May cause eye irritation

Skin: May cause skin irritation

Inhalation: May cause respiratory tract irritation

Ingestion: May cause gastrointestinal irritation and diarrhea

Section 4: First Aid Measures

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Skin: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

Inhalation: Remove to fresh air. Get medical attention if symptoms occur.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately. Get medical attention if symptoms occur.

Note to physician: High pressure applications. Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Not that high pressure may force the product considerable distances along tissue planes.

Section 5: Fire Fighting Measures

Fire/explosion hazards: In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media: Use an extinguishing agent suitable for the surrounding fire. Do Not use water jet.

Hazardous combustion products: Halogenated compounds, carbon oxides

Protective clothing: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazardous decomposition products: Hydrogen fluoride and Carbonyl fluoride

Section 6: Accidental Release Measures

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities it the product has caused environmental pollution.

Spills: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose in accordance of all local, state, and federal laws.

Section 7: Handling and Storage

Handling: Put on appropriate personal protective equipment. Workers should wash hands and face before eating, drinking, and smoking. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Storage: Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8: Exposure Controls and Personal Protection

Occupational exposure limits: Not available

Control measures: Use only with adequate ventilation. If user operations generate dust, fumes, gas, or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures: wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Personal protection

Eyes: Avoid contact with eyes. Safety glasses with side shields or chemical goggles.

Skin and body: Avoid contact with skin and clothing. Wear suitable protective clothing.

Respiratory: Use adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

Hands: The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the conditions of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because of specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9: Physical and Chemical Properties

Physical state: Grease

Color: Off-White

Odor: Odorless

Flash point: Not available

Density: 1900 kg/m³ (1.9 g/cm³) at 15.6 °C

Solubility: insoluble in water.

Section 10: Stability and Reactivity

Stability and reactivity: The product is stable

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame)

Incompatibility with various substances: Lewis acids, aluminum magnesium powder at high temperature. **Hazardous decomposition products:** Under normal conditions of storage and use hazardous decomposition products should not be produced.

Hazardous polymerization: Under normal conditions of storage and use hazardous polymerization will not occur.

Section 11: Toxicological Information

Toxicity Data: Decomposition products thermal decomposition may release hazardous gases. Hydrogen fluoride (HF). Inhalation of decomposition (occurs if heated > 260 °C) or of smoke from contaminated tobacco products may cause respiratory irritation and induce polymer fume fever condition. Symptoms of exposure to decomposition products are lung irritation pulmonary edema, flu-like symptoms.

Carcinogenicity: No known significant effects or critical hazards

Section 12: Ecological Information

Ecotoxicity: No testing has been performed by the manufacturer.

Section 13: Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waster disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way.

Section 14: Transport Information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

Section 15: Regulatory Information

United States inventory (TSCA 8b): In compliance

TSCA 12(b) one-time export: Polytetrafluoroethylene

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found

SARA 302/304/311/312 hazardous chemicals: No products were found

SARA 311/312 MSDS distribution-chemical inventory-hazard identification: acute health hazard

For R- Reporting requirements: This product does not contain any hazardous ingredients at or above regulated thresholds

Supplier notification: This product does not contain any hazardous ingredients at or above regulated thresholds

CERCLA Sections 102a/103 Hazardous Substances: No products were found

State regulations

Massachusetts Right to Know: No components listed

New Jersey Right to Know: No components listed

Pennsylvania Right to Know: Ethene, Tetrafluoro-, Homopolymer

California Prop. 65: Warning: This product contains a chemical known to the State of California to cause cancer Tetrafluoroethylene, inhibited

Other regulations

Canada inventory: All components are listed or exempt

Australia inventory (AICS): all components are listed or exempt

China inventory (IECSC): All components are listed or exempt

Japan inventory (ENCS): All components are listed or exempt

Korea inventory (KECI): All components are listed or exempt

Philippine inventory (PICCS): All components are listed or exempt

Section 16: Other Information Disclaimer of Liability:

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