

DATE PREPARED: October 26, 2015

SUPERSEDES: July 16, 2012

SECTION 1 CHEMICAL AND COMPANY IDENTIFICATION

PRODUCT NAME: **Thomson CHEM-2 100% GFO**

COMPANY NAME: **A.R. Thomson Group**

ADDRESS: 10030 - 31ST AVENUE, EDMONTON, AB T6N 1G4

PHONE NUMBER: (780) 450-8080 FAX (780) 463-2021

SECTION 2 COMPOSITION AND INFORMATION ON INGREDIENTS

COMPONENT NAME	CAS NUMBER	% WT. (Optional)
Polytetrafluoroethylene	9002-84-0	
Graphite	7782-42-5	
Polydimethylsiloxane	63148-62-9	

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Under normal and intended use conditions it is not anticipated that significant amounts of hazardous components will be released. Heating product to temperatures in excess of 400°C can evolve toxic fluorine compounds. Polydimethylsiloxane component may generate formaldehyde when heated above 150°C in air.

While generation of dust is not likely, the breathing of such dust should be avoided.

PRODUCT CONSTITUENTS LISTED AS CARCINOGENS

None known

IARC

OSHA

NTP

Potential Health Effects:

Under normal and intended use conditions it is not anticipated that dust levels sufficient to cause symptoms or adverse health effects will be produced.

Primary Routes of Entry:

Inhalation of dusts or fumes from thermal decomposition. Dermal and ocular contact.

Target Organs:

Prolonged and repeated overexposure may cause lung and respiratory tract damage.

Acute Effects of Overexposure:

High concentrations of graphite dusts may be irritating to the eyes, skin, mucous membranes and respiratory tract. If exposed to thermal decomposition products of the Polytetrafluoroethylene, temporary symptoms of polymer fume fever (chills, fever, cough and malaise).

Chronic Effects of Overexposure:

Prolonged and repeated overexposure to graphite dust may lead to benign pneumoconiosis

Conditions Aggravated by Exposure:

Smoking aggravates the effects of exposure to some product constituents. Pre-existing respiratory and lung diseases may be aggravated where substantial airborne dust levels are presented.

SECTION 4 FIRST AID MEASURES**Eyes:**

Flush the eyes with water for a least 15 minutes. Do not rub eyes. Get medical attention if necessary.

Skin:

Wash contaminated skin thoroughly with soap or mild detergent. Get medical attention if irritation persists. Dermatitis should be treated symptomatically by a physician.

Inhalation:

No adverse effects are anticipated by breathing small amounts during normal and intended use. If exposed to high dust levels, then remove to fresh air. Drink water and clear throat. Blow nose to clear dust.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point: Not Applicable

Method: Not Applicable

Upper Flammable Limit (UFL):

Not Applicable

Lower Flammable Limit (LFL):

Not Applicable

Autoignition Temperature:

Not Determined

Hazardous Products of Combustion

Composition of by-products from the result of a fire or thermal decomposition will vary depending on the specific conditions. Hazardous gases/vapors include smoke, hydrogen fluoride, carbonyl fluoride, perfluorocarbon olefins, tetrafluoroethylene, hexafluoropropylene, formaldehyde, ammonia and carbon monoxide. There may be others unknown to us.

Fire fighting Instructions

As in any fire, use a self-contained breathing apparatus (SCBA) in the pressure-demand mode in conjunction with full protective gear.

Extinguishing Media

Carbon dioxide, water, or ABC dry chemical. Be sure to use fire extinguisher appropriate to surrounding fire.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Small Spill: No special precautions are necessary where packing is intact and there is no substantial product dust generated. For any small amounts of dust, wet wipe and dispose.

Large Spill: If substantial amounts of dust are present as the result of a physical disturbance which disrupts the matrix of the material, the material should first be lightly misted with water then vacuumed using a vacuum cleaner equipped with a High Efficiency Particulate Air (HEPA) filtration device.

SECTION 7 HANDLING AND STORAGE

Handling: Dust generated from this material must be managed by wet wiping or vacuuming with HEPA filtration equipped vacuum cleaners. Personnel involved with handling this product should be wearing appropriate personal protective equipment as outlined in section 8.

Work / Hygienic Practices: Personnel should avoid contaminating cigarettes or tobacco with particles of PTFE. Do not eat or smoke in areas of storage or processing.

Storage: The product is stable under all conditions of storage.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**Engineering Controls****Ventilation:**

Normal and intended use of this product should not produce material component levels in substantial airborne concentrations. In keeping with standard Industrial Hygiene practices, if exposure levels are not known, or if dust levels exceed the occupational exposure limits, then use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels to below recommended exposure limits. Maintain and test ventilation systems in accordance with OSHA regulations (29CFR 1910.94). Review OSHA 29CFR part 1910.1000 or 29CFR Part 1926 Subpart Z for exposure level information.

Personal Protective Equipment**Eyes and Face:**

Special precautions are not normally necessary. If dust is generated, use American National Standards Institute (ANSI) approved eye and face protection when subjected to potential eye and face hazards.

Skin: Use of impervious gloves is recommended.

Respiratory:

Normal intended use of this product will not produce material component levels in substantial concentrations. In keeping with standard Industrial Hygiene practices, if exposure levels are not known, or if the dust levels exceed occupational exposure limits, and engineering controls cannot be used then use the appropriate respiratory protection.

For protection against dust or vapors as a result of thermal decomposition wear a NIOSH approved respirator suitable for the anticipated airborne concentration.

EXPOSURE GUIDELINES

Component	(8 Hr. TWA) OSHA PEL	(8 Hr. TWA) ACGIH TLV
Polytetrafluoroethylene	None Established	None Established
Graphite	15 mppcf 30 mg/m ³ / %SiO ₂ + 2 (total)	2.0 mg/m ³ (respirable dust)
Polydimethylsiloxane	Polydimethylsiloxane	Polydimethylsiloxane

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Black braided or die formed rings.	Boiling Point:	Not Applicable
Odor:	Slight odor	Freezing Point:	Not Applicable
Physical State:	Solid	Melting Point:	PTFE Gel Point is approximately 327C (620-F)
pH:	Not Applicable	Solubility In Water:	Negligible
Vapor Pressure:	Not Applicable	Specific Gravity:	Not Applicable

SECTION 10 STABILITY AND REACTIVITY

Stability: The material is stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to avoid: Do not expose the material to direct flame.

Materials to avoid: Strong oxidizing agents.

Hazardous Decomposition Products: Composition of by-products from the result of a fire or thermal decomposition will vary depending on the specific conditions. Hazardous gases/vapors include smoke, hydrogen fluoride, carbonyl fluoride, perfluorocarbon olefins, tetrafluoroethylene, hexafluoropropylene, formaldehyde, ammonia and carbon monoxide. There may be others unknown to us.

SECTION 11 TOXICOLOGICAL INFORMATION

Toxicity data is available on the individual components. Call (780) 450-8080 for information.

SECTION 12 ECOLOGICAL INFORMATION

No information available.

SECTION 13 DISPOSAL INFORMATION

Dispose of in accordance with local, state, and federal regulations. Land fill is normally recommended.

SECTION 14 TRANSPORTATION INFORMATION

D.O.T. Shipping Name: Not Regulated

SECTION 15 REGULATORY INFORMATION

This product contains the following materials known to the state of California to cause cancer or reproductive effects: None Known.

SECTION 16 OTHER INFORMATION

This MSDS is prepared to safeguard the health of workers and to comply with the requirements of 29CFR 1910.1200. Consult your employer before working with this material.

DISCLAIMER

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, storage, transportation and release and is not considered a warranty or quality specification. The responsibility for the compliance with existing law and regulations lies with the receiver of the product.

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