# SDS – SAFETY DATA SHEET

## SECTION I: IDENTIFICATION

**Product name:** MASTERS® PRO-DOPE
**Product use:** Thread sealing compound.

**Supplier name and address:**
G.F. THOMPSON CO. LTD.
620 Steven Court, Unit 11
Newmarket, Ontario
L3Y 6Z2

**Manufacturer name and address:**
Refer to supplier.

**Emergency Tel:**
Mon – Fri, 7:30 am to 5:00 pm EST
905-898-2557
800-499-3673 (toll free)
**24 hr Emergency Tel:**
905-252-6219 or 647-448-2050

## SECTION II: HAZARDS IDENTIFICATION

**Classification of the chemical**

White paste (Solid). Slight alcohol odour.

*Most important hazards:*
Flammable solid. May be ignited by open flame.
Causes serious eye irritation. May cause cancer. Causes damage to organs through prolonged or repeated exposure.
Occupational exposure to the substance or mixture may cause adverse effects. For further information, please refer to section 11 of the SDS.

This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).
Hazardous classification:
- Flammable solid - Category 1
- Eye damage/irritation - Category 2A
- Carcinogenicity - Category 1
- Specific target organ toxicity, repeated exposure - Category 1

**Label elements**

*Hazard pictogram(s)*

*Signal Word*

DANGER!

*Hazard statement(s)*

Flammable solid.
Causes serious eye irritation.
May cause cancer.
Causes damage to organs through prolonged or repeated exposure.

*Precautionary statement(s)*

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical and ventilating equipment.
Do not breathe dust or fume.
Wash exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/clothing and eye/face protection.

IF exposed or concerned: Get medical attention/advice.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.
In case of fire: Use carbon dioxide, dry chemical or foam to extinguish.

Store locked up.

Dispose of contents/container in accordance with local regulation.

**Other hazards**

*Other hazards which do not result in classification:*
Burning produces obnoxious and toxic fumes. May form peroxides when in contact with air and light. Rate of peroxide formation is not known. May be mildly irritating to skin and respiratory system. May cause gastrointestinal irritation. In extremely high concentrations, may cause symptoms of central nervous system depression. Prolonged overexposure may cause slight liver and kidney effects, such as increased organ weights.

*Environmental precautions:*
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Avoid release to the environment. See ECOLOGICAL INFORMATION, Section 12.

## SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| Chemical name | Common name and synonyms | CAS # | Concentration (% by weight) |
|---|---|---|---|
| **Crystalline silica, quartz** | Quartz silica<br>Crystallized silicon dioxide | 14808-60-7 | **20.2** |
| **Propylene glycol n-butyl ether** | 1-Butoxy-2-propanol<br>Propylene glycol monobutyl ether<br>PnB | 5131-66-8 | **9.79** |
| **Isopropanol** | Isopropyl alcohol<br>2-Propanol | 67-63-0 | **6.93** |
| **titanium dioxide** | Anatase<br>Titanic acid anhydride | 13463-67-7 | **4.09** |

## SECTION IV: FIRST-AID MEASURES

**Description of first aid measures**

*Ingestion* : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical attention/advice.

*Inhalation* : If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing is irregular or stopped, administer artificial respiration. IF exposed or concerned: Get medical advice/attention.

*Skin contact* : For skin contact, wash with soap and water while removing contaminated clothing. If irritation persists, seek prompt medical attention. Wash contaminated clothing before reuse.

*Eye contact* : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.

**Most important symptoms and effects, both acute and delayed**

: Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.
May cause cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.
Causes damage to organs through prolonged or repeated exposure. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Repeated or prolonged inhalation of fine dusts may cause severe scarring of the lungs, a disease called silicosis, and alveolar proteinosis (lower lung disease). Symptoms may include coughing, shortness of breath and eventually severe respiratory impairment.
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
In extremely high concentrations, may also cause nausea, vomiting, dizziness, drowsiness and other symptoms of central nervous system depression.
Mild skin irritant. Symptoms may include mild redness and swelling.
Prolonged overexposure may cause slight liver and kidney effects, such as increased organ weights.

**Indication of any immediate medical attention and special treatment needed**

: Provide general supportive measures and treat symptomatically.

## SECTION V: FIRE-FIGHTING MEASURES

**Extinguishing media**

*Suitable extinguishing media*

: Carbon dioxide ($CO_2$); Dry chemical; Alcohol resistant foam

*Unsuitable extinguishing media*

: Do not use a solid water stream as it may scatter and spread fire.

**Special hazards arising from the substance or mixture / Conditions of flammability**

: Flammable solid. May be ignited by open flame. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

**Hazardous combustion products**

: Carbon oxides; Aldehydes; Acids; Hydrocarbons; Other irritating fumes and smoke.

**Special protective equipment and precautions for firefighters**

*Protective equipment for fire-fighters*

: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

*Special fire-fighting procedures*

: Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

## SECTION VI: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

**Environmental precautions** : Avoid discharge into drains, water courses or onto the ground.

**Methods and material for containment and cleaning up**

: Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Use only non-sparking tools. Use inert, non-combustible absorbents to assist the pick up of material. Scrape up product and place it into a container for disposal. Keep in properly labelled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Clean contaminated floors and objects thoroughly while observing environmental regulations. Refer to Section 13 for disposal of contaminated material. Contact the proper local authorities.

## SECTION XII: HANDLING AND STORAGE

**Precautions for safe handling**

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Provide adequate ventilation. Wear suitable protective equipment during handling. Wear protective gloves/clothing and eye/face protection. Do not breathe dust or fume. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Ground/Bond container and receiving equipment. Use explosion-proof electrical and ventilating equipment. Avoid and control operations which create high vapor or dust concentrations. Keep away from incompatibles. Wash thoroughly after handling. Keep container tightly closed when not in use. Empty containers retain residue and can be dangerous.

**Conditions for safe storage** : Store in cool/well-ventilated place. Store locked up. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking.

**Incompatible materials** : Strong oxidizing agents; Strong acids; Halogenated compounds; Alkali metals

## SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Limits:**

| Chemical Name | ACGIH TLV | | OSHA PEL | |
|---|---|---|---|---|
| | TWA | STEL | PEL | STEL |
| Crystalline silica, quartz | 0.025 mg/m³ (respirable) | N/Av | 0.1 mg/m³ (respirable) (final rule limit) | N/Av |
| Propylene glycol n-butyl ether | N/Av | N/Av | N/Av | N/Av |
| Isopropanol | 200 ppm | 400 ppm | 400 ppm (980 mg/m³) | N/Av |
| titanium dioxide | 10 mg/m³ | N/Av | 15 mg/m³ (total dust) | N/Av |

**Exposure controls**

**Ventilation and engineering measures**

: Provide adequate ventilation. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Use explosion-proof equipment. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory protection** : If airbourne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with CSA Z94.4-02. Advice should be sought from respiratory protection specialists.

**Skin protection** : Wear protective gloves/clothing. The suitability for a specific workplace should be discussed with the producers of the protective gloves. Wear apron or protective clothing in case of contact.

**Eye / face protection** : Wear eye/face protection. Wear as appropriate: Safety glasses with side shields; Tightly fitting safety goggles. A full face shield may also be necessary.

**Other protective equipment** : Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

**General hygiene considerations**

: Do not breathe dust or fume. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

## SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : White paste (Solid)

| | | |
|---|---|---|
| **Odour** | : | Slight alcohol odour. |
| **Odour threshold** | : | N/Av |
| **pH** | : | N/Av |
| **Melting/Freezing point** | : | N/Av |
| **Initial boiling point and boiling range** | : | N/Av |
| **Flash point** | : | 25°C (77°F) |
| **Flashpoint (Method)** | : | N/Av |
| **Evaporation rate (BuAe = 1)** | : | N/Av |
| **Flammability (solid, gas)** | : | Flammable solid |
| **Lower flammable limit (% by vol.)** | : | N/Av |
| **Upper flammable limit (% by vol.)** | : | N/Av |
| **Oxidizing properties** | : | None known. |
| **Explosive properties** | : | Not explosive |
| **Vapour pressure** | : | N/Av |
| **Vapour density** | : | N/Av |
| **Relative density / Specific gravity** | : | 1.41 |
| **Solubility in water** | : | slightly soluble |
| **Other solubility(ies)** | : | N/Av |
| **Partition coefficient: n-octanol/water or Coefficient of water/oil distribution** | : | N/Av |
| **Auto-ignition temperature** | : | N/Av |
| **Decomposition temperature** | : | N/Av |
| **Viscosity** | : | N/Av |
| **Volatiles (% by weight)** | : | 17.29% |
| **Volatile organic Compounds (VOC's)** | : | 246 g/L |
| **Absolute pressure of container** | : | N/Ap |
| **Flame projection length** | : | N/Ap |
| **Other physical/chemical comments** | : | No additional information. |

## SECTION X: STABILITY AND REACTIVITY

| | | |
|---|---|---|
| **Reactivity** | : | Not normally reactive. |
| **Chemical stability** | : | Stable under normal conditions. May release peroxides on exposure to light and air, or on contact with incompatibles. Rate of peroxide formation is not known. |
| **Possibility of hazardous reactions** | : | Hazardous polymerization does not occur. |
| **Conditions to avoid** | : | Direct sources of heat. Keep away from direct sunlight. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials. |
| **Incompatible materials** | : | Strong oxidizing agents; Strong acids; Halogenated compounds; Alkali metals |
| **Hazardous decomposition products** | : | None known, refer to hazardous combustion products in Section 5. |

## SECTION XI: TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

**Routes of entry inhalation** : YES

**Routes of entry skin & eye** : YES

**Routes of entry Ingestion** : YES

**Routes of exposure skin absorption**

: YES

### Potential Health Effects:

**Signs and symptoms of short-term (acute) exposure**

*Sign and symptoms Inhalation*

: Mild respiratory irritant. May cause coughing and breathing difficulties. In extremely high concentrations, may also cause nausea, vomiting, dizziness, drowsiness and other symptoms of central nervous system depression.

*Sign and symptoms ingestion*

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache).

*Sign and symptoms skin* : May cause mild skin irritation. Symptoms may include mild redness and swelling. May be absorbed through the skin.

*Sign and symptoms eyes* : Causes serious eye irritation. Symptoms may include redness, pain, tearing and conjunctivitis.

**Potential Chronic Health Effects**

: Prolonged overexposure may cause slight liver and kidney effects, such as increased organ weights.

**Mutagenicity** : No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** : This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:
Carcinogenicity - Category 1. May cause cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.
Contains crystalline silica. Crystalline silica is classified as carcinogenic by IARC (Group 1), the ACGIH (Category A2) and the NTP (Group 1 - Known human carcinogen).
This product also contains: titanium dioxide. Titanium dioxide is classified as possibly carcinogenic by IARC (Group 2B).
No other components are classified as carcinogenic by IARC, ACGIH, OSHA or NTP.

**Reproductive effects & Teratogenicity**

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

**Sensitization to material** : No data available to indicate product or components may be respiratory sensitizers.
No data available to indicate product or components may be skin sensitizers.

**Specific target organ effects** : This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:
Specific target organ toxicity, repeated exposure - Category 1. Causes damage to organs through prolonged or repeated exposure.
Repeated or prolonged inhalation of fine dusts may cause severe scarring of the lungs, a disease called silicosis, and alveolar proteinosis (lower lung disease). Symptoms may include coughing, shortness of breath and eventually severe respiratory impairment.

**Medical conditions aggravated by overexposure**

: Pre-existing skin, eye, respiratory and central nervous system disorders.

**Synergistic materials** : None reported by the manufacturer.

**Toxicological data** : No data is available on the product itself. The calculated ATE values for this mixture are:
ATE oral = 20,150 mg/kg

See below for individual ingredient acute toxicity data.

| Chemical name | $LC_{50}$ (4hr) inh, rat | $LD_{50}$ (Oral, rat) | $LD_{50}$ (Rabbit, dermal) |
|---|---|---|---|
| Crystalline silica, quartz | N/Av | N/Av | N/Av |
| Propylene glycol n-butyl ether | > 3.52 mg/L (vapour) (No mortality) | 2800 - 4500 mg/kg | > 2000 mg/kg (No mortality) |
| Isopropanol | 17 000 ppm (41.8 mg/L) (vapour) | 4720 mg/kg | 12 890 mg/kg |
| titanium dioxide | > 6.82 mg/kg (dust) (No mortality) | > 25 000 mg/kg | > 10 000 mg/kg |

**Other important toxicological hazards**

: None reported by the manufacturer.

## SECTION XII: ECOLOGICAL INFORMATION

**Refer to the supplier for Ecological Information**

## SECTION XIII: DISPOSAL CONSIDERATIONS

**Refer to the supplier for Disposal Considerations**

## SECTION XIV: TRANSPORTATION INFORMATION

**Refer to the supplier for Transportation Information**

## SECTION XV: REGULATORY INFORMATION

**Refer to the supplier for Regulatory Information**

## SECTION XVI: OTHER INFORMATION

**Prepared by:** G. F. Thompson Co. Ltd
**Telephone No.:** 905-898-2557
**Preparation date:** **May 30, 2017**