

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Product name: MASTERS PRO-BLUE

Product use: Thread sealing compound.

Supplier name and address:

G.F. THOMPSON CO. LTD.

620 Steven Court

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:

905-252-4793

WHMIS CLASS: B4, D1A, D2A, D2B

HMIS Rating:

* - Chronic hazard 0 - Minimal 1 – Slight 2 - Moderate 3 - Serious 4 – Severe

Health: *2 Flammability: 3 Reactivity: 0

SECTION II - INGREDIENTS

<u>Ingredients</u>	<u>CAS#</u>	<u>wt. %</u>	<u>LC₅₀ / 4 Hrs</u>	<u>LD₅₀ mg/kg</u>	
			<u>(Rat, ihl.)</u>	<u>(Rat, oral)</u>	<u>(Rabbit, dermal)</u>
Castor oil	8001-79-4	15 - 40	N/Av	N/Av	N/Av
Ethylene glycol n-butyl ether	111-76-2	10 - 30	450 ppm	320 (rabbit)	400
Isopropyl alcohol	67-63-0	10 - 30	17,000 ppm	4720	12,890

SECTION III - PHYSICAL DATA

Physical state, odour and appearance: Solid paste. Slight alcohol odour. Blue colour

Evaporation rate (n-Butyl acetate = 1): N/Av

Volatile, % by volume: 10

Solubility in water: Slightly soluble

pH: N/Av.

Vapour pressure (mmHg): N/Av

Coefficient of water/oil distribution: N/Av

VOC: 345.6 g/l, 25.4%

Freezing / melting point: N/Av

Odour threshold: N/Av

Specific gravity: 1.41

Boiling point: N/Av

Vapour density (Air = 1): N/Av

Viscosity: N/Av

SECTION IV - FIRE AND EXPLOSION DATA

Conditions of flammability: Flammable solid, due to organic solvent content. Product may be ignited by heat, sparks and flame.

Flash point (Method): 25°C / 77°F (Method not known)

Auto-ignition temperature: N/Av

Upper flammable limit %: N/Av

Lower flammable limit %: N/Av

Means of extinction: Dry chemical, foam, carbon dioxide and water fog. Do not use water jet, as this may spread burning material.

Sensitivity to mechanical impact/static discharge: N/Av.

Special fire fighting procedures: Firefighters should wear proper full protective equipment and self-contained breathing apparatus. Move containers from fire area if it can be done without risk. Water spray may only be useful in cooling equipment and containers exposed to heat and flame.

Unusual fire and explosion hazards: Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Hazardous combustion products: Carbon oxides and other irritating fumes and smoke.

SECTION V - REACTIVITY DATA

Stability: Stable under the recommended storage and handling conditions prescribed. Hazardous polymerization will not occur.

Incompatible materials: Strong oxidizers (e.g. Chlorine, Peroxides, etc.).

Conditions of reactivity: Stable under ambient pressure and temperature. Avoid heat, sparks and flames.

Hazardous decomposition products: None known. Refer to Section IV for 'Hazardous combustion products'.

SECTION VI - TOXICOLOGICAL PROPERTIES

*****Routes of exposure and acute effects*****

Exposure limit: ACGIH-TLV: Ethylene glycol n-butyl ether – 20 ppm; Isopropyl alcohol – 200 ppm.

OSHA-PEL: Ethylene glycol n-butyl ether – 50 ppm (skin); Isopropyl alcohol – 400 ppm.

Routes of exposure: Skin contact, skin absorption, eye contact, inhalation and ingestion.

Irritancy of product: Moderate to severe.

Inhalation: Harmful if inhaled. Inhalation may cause nose, throat and respiratory tract irritation. Symptoms may include headache, nausea, vomiting, other central nervous system effects and blood system effects (red blood cell fragility and hemoglobinuria).

Skin: May cause moderate to severe irritation. Product could be absorbed if left on the skin and cause headache, nausea, vomiting, other central nervous system effects and blood system effects (red blood cell fragility and hemoglobinuria).

Eyes: May cause severe irritation.

Ingestion: Harmful if ingested. May cause irritation to the mouth, throat and stomach. Symptoms may include headache, nausea, vomiting, diarrhea, other central nervous system effects and possibly blood system effects (red blood cell fragility and hemoglobinuria).

Chronic effects: Prolonged or repeated skin contact may cause severe drying and cracking of the skin (dermatitis). Prolonged or repeated inhalation may cause severe toxicity to the blood system. At higher concentrations, prolonged inhalation may cause liver damage.

Carcinogenicity: Contains Ethylene glycol n-butyl ether. Ethylene glycol n-butyl ether is classified as a confirmed animal carcinogen with unknown relevance to humans by ACGIH (Group A3). None of the listed ingredients are classified as carcinogenic by IARC.

Reproductive effects, Teratogenicity, Mutagenicity: Contains Isopropyl alcohol. Isopropyl alcohol may cause fetotoxic effects, based on animal data.

Sensitization to material: None known.

Synergistic materials: N/Av.

Conditions aggravated by exposure: Pre-existing skin, eye and respiratory disorders.

SECTION VII - FIRST AID

Inhalation: Immediately remove victim to fresh air. Obtain medical attention.

Skin contact: Immediately wash skin with mild soap and plenty of water, while removing contaminated clothing. Obtain medical attention immediately.

Eye contact: Immediately flush eyes thoroughly with water for at least fifteen minutes. Do not rub eyes. Obtain medical attention immediately.

Ingestion: Do not induce vomiting. Obtain medical attention immediately. Never give anything by mouth to an unconscious or convulsing person.

SECTION VIII - PREVENTIVE MEASURES

Spill, leak or release: Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate chemically resistant equipment. Eliminate all sources of heat and flame. Ventilate area of release. Stop leak if you can do so without risk. Scrape up into suitable containers, using method that does not generate sparks. Place any recovered material in closed, labelled containers for recycling or disposal (see below). Clean spill area. Keep out of waterways. Notify the appropriate authorities as required.

Waste disposal: Handle according to recommendations listed below. Dispose in accordance with all applicable government regulations.

SECTION VIII - PREVENTIVE MEASURES Continued

PROTECTIVE EQUIPMENT

Respiratory protection: None required under normal use. For prolonged exposure or if the TLV is exceeded, wear NIOSH-approved respirators.

Ventilation: Use in well ventilated area. General ventilation should be sufficient under normal use. Local exhaust ventilation may be necessary for prolonged exposures or if the product is being heated.

Protective gloves: Gloves impervious to the material, must be worn. Advice should be sought from glove suppliers.

Eye protection: Safety goggles, to prevent product from entering the eyes.

Other protective equipment: An eyewash station and safety shower should be made available in the immediate working area. Other equipment may be required according to workplace standards.

*** STORAGE & HANDLING ***

Storage and handling conditions:

Handling: Wear appropriate chemically protective equipment. Use in a well ventilated area. Avoid inhaling vapours or fumes. Avoid contact with skin, eyes, and clothing. Avoid and control operations that create dusty atmospheres. Keep away from heat, sparks and flame. Ground all equipment during handling. Keep away from incompatible materials. Keep container tightly closed when not in use. Wash thoroughly after handling.

Storage: Store in a cool, dry, well-ventilated area away from incompatibles (refer to Section V), heat and flame. No smoking in the area. Inspect periodically for damage or leaks.

Special Shipping Information - Transportation of Dangerous Goods Regulations (TDGR): Refer to the supplier for shipping information.

SECTION IX - PREPARATION INFORMATION

Prepared by: G. F. Thompson Co. Ltd

Telephone No.: 905-898-2557

Preparation date: December 1, 2012

Additional notes or references:

Legend: ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service

HMIS: Hazardous Materials Identification System

IARC: International Agency for Research on Cancer

N/Ap: Not Applicable

N/Av: Not Available

NIOSH: National Institute of Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

RTECs: Registry of Toxic Effects of Chemical Substances

TLV: Threshold Limit Values

WHMIS: Workplace Hazardous Materials Information System

References: 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2005.

2. International Agency for Research on Cancer Monographs, searched 2006.

3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2006 (Chempendium and RTECs).

4. Material Safety Data Sheet from manufacturer.