

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Product name: MASTERS A-PLUS

Product use: Anaerobic adhesive sealant for pipe threads and gaskets.

Chemical family: Mixture

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. #: 905-898-2557

WHMIS CLASS: D1A, D2B

SECTION II - INGREDIENTS

<u>Ingredients</u>	<u>CAS#</u>	<u>wt. %</u>	<u>LC₅₀ / 4 Hrs (Rat, ihl.)</u>	<u>LD₅₀ mg/kg</u>	
				<u>(Rat, oral)</u>	<u>(Rabbit, dermal)</u>
Bisphenol A fumarate resin	39382-25-7	15 - 40	N/Av	N/Av	N/Av
2-Hydroxyethyl methacrylate	868-77-9	15 - 40	N/Av	3275 (mouse)	N/Av
Polymeric plasticizer	29408-67-1	10 - 30	N/Av	N/Av	N/Av
Polyethylene	9002-88-4	5 - 10	N/Av	>3000	N/Av
Teflon	9002-84-0	5 - 10	N/Av	N/Av	N/Av
Titanium dioxide	13463-67-7	1 - 5	N/Av	N/Av	N/Av
Cumene hydroperoxide	80-15-9	1 - 5	220 ppm	382	500 (rat)
N,N-Dialkyltoluidines	613-48-9	1 - 5	N/Av	N/Av	N/Av
Saccharin	81-07-2	1 - 5	N/Av	17,000	N/Av
Silica, amorphous treated	112945-52-5	1 - 5	N/Av	N/Av	N/Av

SECTION III - PHYSICAL DATA

Physical state, odour and appearance: White paste, mild odour.

Coefficient of water/oil distribution: N/Av

pH: N/Av.

Freezing point: N/Av

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

Vapour pressure (mmHg @ 27°C / 80°F): <5

Viscosity: 550,000 centipoise.

Odour threshold: N/Av

Specific gravity: 1.09 @ 27°C / 80°F

Boiling point: >149°C / 300°F

Vapour density (Air = 1): N/Av

VOC Content: 8.6%

Solubility in water: Slight

SECTION IV - FIRE AND EXPLOSION DATA

Conditions of flammability: Not considered flammable, however may be ignited by extreme heat and flame.

Flash point (Method): >95°C / 203°F (TCC)

Upper flammable limit %: N/Av

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

Sensitivity to mechanical impact/static discharge: Not expected to be sensitive.

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 be ineffective. 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, nitrogen oxides, sulfur oxides, formaldehyde, acrolein, hydrogen fluoride, carbon tetrafluoride, carbonyl fluoride, phenol and various other hydrocarbons.

SECTION V - REACTIVITY DATA

Stability: Stable under the recommended storage and handling conditions prescribed. Product may decompose slowly in direct sunlight and air. Hazardous polymerization will not occur.

Incompatible materials: Oxidizing agents, reducing agents, acids.

Conditions of reactivity: Stable under ambient pressure and temperature. Avoid heat, flame and direct sunlight.

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: Titanium dioxide – 10 mg/m³; Silica, amorphous treated – 10 mg/m³ (*As Particles Not Otherwise Specified - PNOS*).

OSHA-PEL: Titanium dioxide – 15 mg/m³.

Inhalation: Breathing mists or fumes may be harmful or fatal. Inhalation may cause severe irritation to the nose, throat, and respiratory tract. Could lead to pulmonary edema and death. Symptoms may include headache, nausea, dizziness, drowsiness and other Central Nervous System effects. Inhaling fumes from heated product could cause 'Polymer fume fever', a flu-like illness with symptoms such as fever, chills, headache and sore throat.

Skin: May cause moderate irritation. Product may be absorbed.

Eyes: May cause severe eye irritation and permanent eye damage.

Ingestion: Harmful or fatal if swallowed. May cause severe irritation to mouth, throat and stomach. Symptoms may include nausea, vomiting and diarrhea.

Chronic effects: None known.

Carcinogenicity: None of the ingredients are listed by IARC or ACGIH as carcinogens

Reproductive effects, Teratogenicity, Mutagenicity: None known.

Sensitization to material: May cause skin sensitization.

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. If breathing is difficult, give oxygen. Obtain medical attention.

Skin: Wash skin with soap and plenty of water, while removing contaminated clothing. Obtain medical attention. Launder clothing before re-use.

Eyes: Immediately flush eyes thoroughly with water for at least fifteen minutes. Obtain medical attention immediately.

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

SECTION VIII - PREVENTIVE MEASURES

Spill, leak or release: Wear appropriate protective equipment. Eliminate all sources of heat, sparks and flame. Ventilate area of release. Stop leak if you can do so without risk. For small spills, take up with non-combustible, inert absorbent material, then place into a suitable container for later disposal (see below). For large spills, product absorbing on inert materials may cause polymerization, generating significant heat and pressure in closed containers. Vent disposal containers to prevent buildup of pressure. Notify the appropriate authorities as required.

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

*****PROTECTIVE EQUIPMENT*****

Respiratory protection: For prolonged exposure or if the TLV is exceeded, wear NIOSH-approved respirators.

Ventilation: Use in well ventilated area. Use general / local exhaust ventilation for prolonged exposures or if the TLV is not known.

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.

SECTION VIII - PREVENTIVE MEASURES CONTINUED

***** STORAGE & HANDLING *****

Storage and handling conditions:

Handling: Wear appropriate protective equipment. Use in a well ventilated area. Avoid inhalation of vapours, fumes and mists. Avoid contact with skin, eyes, and clothing. Eliminate all ignition sources. Keep away from oxidizing materials and incompatibles. Use caution when opening cap. Keep container closed when not in use. Wash thoroughly after handling.

Storage: Store in a cool (<43°C / 110°F), dry, well-ventilated area away from incompatibles, heat, flame and direct sunlight. No smoking in the area.

Special Shipping Information:

Transportation of Dangerous Goods Regulations (TDGR): Not regulated for transport by ground within Canada.

SECTION IX - PREPARATION INFORMATION

Prepared by: G.F. THOMPSON CO. LTD.

Telephone No. 905-898-2557

Preparation date: December 1, 2009

Additional notes or references:

CEPA information: All ingredients are listed on the DSL.

Abbreviations: ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service

CEPA: Canadian Environmental Protection Agency

DSL: Domestic Substances List

IARC: International Agency for Research on Cancer

NIOSH: National Institute of Occupational Safety and Health

N/Av: Not Available

N/Ap: Not Applicable

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

RTECs: Registry of Toxic Effects of Chemical Substances

TCC: Tag Closed Cup

TLV: Threshold Limit Values

- References:
1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2004.
 2. International Agency for Research on Cancer Monographs, 2004.
 3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2004 (Chempendium and RTECs).
 4. Material Safety Data Sheet from manufacturer.