

## SDS - SAFETY DATA SHEET

## SECTION I: IDENTIFICATION

**Product name:** MASTERS® METALLIC COMPOUND™

**Product use:** Pipe thread and gasket sealant.

**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**

Medium, grey paste. Alcohol odour.

*Most important hazards:*

Combustible liquid. May be ignited by open flame.

Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child. 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.

Very toxic to aquatic life with long lasting effects. Avoid release to the environment. See Section 12 for more environmental information.

This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

**Classification:**

Flammable liquid – Category 4

Germ cell mutagenicity - Category 2

Carcinogenicity - Category 1B

Reproductive toxicity - Category 1A

Specific target organ toxicity, repeated exposure - Category 1

**Label elements**

*Hazard pictogram(s)*



*Signal Word*

DANGER!

*Hazard statement(s)*

Combustible liquid.

Suspected of causing genetic defects.

May cause cancer.

May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.



**METALLIC COMPOUND**

*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.  
Do not breathe dust, fume or vapor.  
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 advice/attention.  
In case of fire: Use carbon dioxide, dry chemical or foam to extinguish.

Store in a well-ventilated place.  
Store locked up.

Dispose of contents/container in accordance with local regulation.

**Other hazards**

*Other hazards which do not result in classification:*

Toxic fumes, gases or vapours may evolve on burning. May be mildly irritating to skin, eyes and respiratory system. Inhalation of fumes may result in metal fume fever, a flu-like illness. May cause gastrointestinal irritation.

*Environmental precautions:*

Very toxic to aquatic life with long lasting effects. Avoid release to the environment. See Section 12 for more environmental information.

**SECTION III: COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
Lead	Lead, elemental	7439-92-1	80.67
n-Butyl alcohol	n-Butanol 1-Hydroxybutane	71-36-3	1.19

**SECTION IV: FIRST-AID MEASURES**

**Description of first aid measures**

- Ingestion* : Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
- 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 exposed or concerned: Get medical advice/attention. Launder contaminated clothing before reuse, or discard.
- Eye contact* : Rinse immediately with plenty of water, also under the eyelids. IF exposed or concerned: Get medical advice/attention.

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

- : Suspected of causing genetic defects.  
May cause cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.  
May damage fertility or the unborn child. Effects of excessive exposures may include: Deformity; Delayed development; Functional disorders in fetus; Sterility; Reduced fertility; Menstruation disorders.  
Causes damage to organs through prolonged or repeated exposure. Lead accumulates in body tissues and prolonged overexposure to even low levels may eventually result in lead toxicity syndrome which may result in permanent damage or death. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite, indigestion, nausea, vomiting, constipation, abdominal cramps, disturbance of rest and sleep, and weakness. Lead may damage kidney function, the blood forming system and the reproductive system. May be mildly irritating to skin, eyes and respiratory system. May cause coughing and breathing difficulties. Exposure may cause temporary irritation, redness or discomfort. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**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*

- : Use water fog or fine spray, foams, carbon dioxide or dry chemical.

*Unsuitable extinguishing media*

- : Do not use water jet, as this may spread burning material.

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

- : Combustible liquid. 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. Toxic fumes, gases or vapours may evolve on burning.

**Hazardous combustion products**

- : Metal oxides; Carbon oxides; Aldehydes; Acids; unburned alcohols; Other unidentified organic compounds.

**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. Use water spray to cool unopened containers. 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 personal 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**

- : Prevent product from entering drains, sewers, waterways and soil. Discharge into the environment must be avoided.

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

- : Ventilate the area. Prevent further leakage or spillage if safe to do so. Eliminate all ignition sources. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand). Pick up and transfer to properly labeled containers. Do not use combustible absorbents, such as sawdust. Contaminated absorbent material may pose the same hazards as the spilled product. Refer to Section 13 for disposal of contaminated material. Contact the proper local authorities.

**SECTION VII: HANDLING AND STORAGE****Precautions for safe handling**

- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Use with adequate ventilation. Wear suitable protective equipment during handling. Wear protective gloves/clothing and eye/face protection. Do not breathe dust, fume or vapor. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Avoid contact with incompatible materials. Wash thoroughly after handling. Keep container tightly closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

**Conditions for safe storage**

- : Store in a cool, well-ventilated area. Inspect periodically for damage or leaks. Store away from incompatible materials. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Store locked up.

**Incompatible materials**

- : Strong oxidizing agents; Strong acids; Strong bases

**SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Limits:**

<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Lead	0.05 mg/m <sup>3</sup>	N/Av	50 µg/m <sup>3</sup> (as Pb) (final rule limit)	N/Av
n-Butyl alcohol	20 ppm	N/Av	100 ppm (300 mg/m <sup>3</sup> )	N/Av

**Exposure controls****Ventilation and engineering measures**

- : Use with 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. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory protection**

- : If airborne 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 resistant clothing and boots.

**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, fume or vapor. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

**SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance** : Medium, grey paste.
- Odour** : Alcohol odour.
- Odour threshold** : N/Av
- pH** : N/Av
- Melting/Freezing point** : 65.6 - 187.8°C (150 - 370°F) (emulsion range)



**METALLIC COMPOUND**

**Initial boiling point and boiling range**

: > 117.7°C (244°F) (based on ingredients)

**Flash point** : 63°C (145.4°F)

**Flashpoint (Method)** : closed cup

**Evaporation rate (BuAe = 1)** : N/Av

**Flammability (solid, gas)** : Not applicable.

**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**

: N/Av

**Solubility in water** : Insoluble.

**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)** : 1.6%

**Volatile organic Compounds (VOC's)**

: 54.4 g/L

**Absolute pressure of container**

: N/Av

**Flame projection length** : N/Av

**Other physical/chemical comments**

: No additional information.

**SECTION X: STABILITY AND REACTIVITY**

**Reactivity** : Not normally reactive.

**Chemical stability** : Stable under normal conditions.

**Possibility of hazardous reactions**

: Hazardous polymerization does not occur.

**Conditions to avoid**

: Do not use in areas without adequate ventilation. Avoid contact with incompatible materials. Avoid heat and open flame.

**Incompatible materials**

: Strong oxidizing agents; Strong acids; Strong bases

**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**

: NO



**Potential Health Effects:**

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

*Sign and symptoms Inhalation*

- : Mild respiratory irritant. May cause coughing and breathing difficulties. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath.  
Contains lead. Inhalation of lead fumes, mists or vapours may cause cumulative effects, which develop slowly over time and resemble chronic overexposure. Symptoms of overexposure to lead may include nausea, headache, fatigue, cramps, vomiting, diarrhea, constipation, confusion, convulsions, anemia and muscular weakness.

*Sign and symptoms ingestion*

- : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may cause symptoms similar to inhalation.

*Sign and symptoms skin*

- : Direct skin contact may result in little or no irritation. Direct skin contact may cause temporary redness. Can be absorbed through open wounds or cuts, causing lead poisoning (effects similar to those listed for Inhalation).

*Sign and symptoms eyes*

- : Direct eye contact may cause slight or mild, transient irritation. Direct eye contact may cause temporary redness.

**Potential Chronic Health Effects**

- : Pneumoconiosis, or “dusty lung” disease, may result from chronic exposure to any dust. Repeated or prolonged inhalation of fine dusts may cause an increase in mucous production.  
This product contains a lead and/or lead compounds. Overexposure to lead dust and fumes adversely affects blood and blood forming tissues, kidneys, liver and the central/peripheral nervous systems and male/female reproductive organs.

**Mutagenicity**

- : This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:  
Germ cell mutagenicity - Category 2. Suspected of causing genetic defects.  
Contains: lead compounds.  
Lead is known to cause mutations in both non-reproductive (somatic) cells and reproductive (germ) cells.

**Carcinogenicity**

- : This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:  
Carcinogenicity - Category 1A. May cause cancer. Symptoms may include persistent coughing, shortness of breath, coughing up blood and wheezing.  
Contains: lead compounds.  
Lead is classified as possibly carcinogenic by IARC (Group 2A), the ACGIH (Category A3), the NTP (reasonably anticipated) and OSHA.

**Reproductive effects & Teratogenicity**

- : This material is classified as hazardous under Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification:  
Reproductive toxicant: Category 1A. May damage fertility or the unborn child. Effects of excessive exposures may include: Deformity; Delayed development; Functional disorders in fetus; Sterility; Reduced fertility; Menstruation disorders.  
Contains: lead compounds.  
Lead compounds are known to cause certain reproductive effects in both males and females. Lead compounds are known to cause embryotoxicity.

**Sensitization to material**

- : Not expected to be a skin or respiratory sensitizer.



**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.  
Contains: lead and lead compounds.  
Lead accumulates in body tissues and prolonged overexposure to even low levels may eventually result in lead toxicity syndrome which may result in permanent damage or death. Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite, indigestion, nausea, vomiting, constipation, abdominal cramps, disturbance of rest and sleep, and weakness. Lead may damage kidney function, the blood forming system and the reproductive system.

**Medical conditions aggravated by overexposure**

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

**Synergistic materials**

: None known or reported by the manufacturer.

**Toxicological data**

: No data is available on the product itself. The calculated ATE values for this mixture are:  
ATE oral = 66,387 mg/kg  
ATE dermal = 285,882 mg/kg  
ATE inhalation (vapours) = 2042 mg/L/4H

See below for individual ingredient acute toxicity data.

<u>Chemical name</u>	<u>LC<sub>50</sub>(4hr)</u> <u>inh, rat</u>	<u>LD<sub>50</sub></u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Lead	> 5.05 mg/L (dust) (No mortality) (Read-across)	> 2000 mg/kg (No mortality) (Read-across)	> 2000 mg/kg (No mortality) (Read-across)
n-Butyl alcohol	8000 ppm (24.3 mg/L) (vapour)	790 - 4360 mg/kg	3402 mg/kg

**Other important toxicological hazards**

: None known or reported by the manufacturer.

**SECTION XII: ECOLOGICAL INFORMATION**

Refer to the supplier for Ecological Information

**SECTION XII: 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 Informations

**SECTION XV1: OTHER INFORMATION**

**Prepared by:** G. F. Thompson Co. Ltd  
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**Preparation date:** May 30, 2017