

MATERIAL SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI and Canadian WHMIS Standards

1. PRODUCT IDENTIFICATION

CHEMICAL NAME; CLASS: TEMPIL BLOXIDE

PRODUCT USE:	Document Number: 90367 Weldable Rust Preventive Coating
SUPPLIER/MANUFACTURER'S NAME:	TEMPIL, INC.
ADDRESS:	2901 HAMILTON BLVD. SOUTH PLAINFIELD, NJ 07080
BUSINESS PHONE:	CHEMTREC: 1-800-424-9300 1-908-757-8300

2. COMPOSITION and INFORMATION ON INGREDIENTS

CHEMICAL NAME Hazardous	CAS #	Wt. %	EXPOSURE LIMITS IN AIR					OTHER
			ACGIH		OSHA			
			TLV ppm	STEL ppm	PEL ppm	STEL ppm	IDLH ppm	
Aluminum Flake	7429-90-5	5-10	10 mg/cu. m	NE	15 mg/cu.m	NE	NE	NE
Modified Melamine- Formaldehyde	N/A	1-5	NE	NE	NE	NE	NE	NE
n- Butanol	71-36-3	1-5	50	NE	50	NE	NE	NE
Xylene	1330-20-7	40-45	100	150	100	150	NE	NE
Aliphatic pet. distillates	64742-89-8	15-20	NE	NE	NE	NE	NE	NE
Ethyl benzene	100-41-4	5-10	100	125	100	125	NE	NE

NE = Not Established

C = Ceiling Limit

See Section 16 for Definitions of Terms Used.

NOTE: all WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-1993 format.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is a flammable. May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Harmful if inhaled Vapors are irritating to eyes and respiratory tract. Vapors may cause fire or explosion.

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE:

The most significant route of over-exposure for this product is by contact with the skin. Inhalation or eye contact with this product is also a possible route of exposure. Stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), and death.

INHALATION: Inhalation is harmful. Exposure to high concentrations of this product may cause breathing difficulty, dizziness, headaches or respiratory irritation. Respiratory symptoms associated with pre-existing lung disorders may be aggravated by exposure to ingredients in this product. Extremely high concentration may cause drowsiness, unconsciousness, coma or death. Excessive inhalation of vapors can cause nasal and respiratory irritation. Some reports have associated repeated and prolonged occupational to solvents with permanent brain and nervous system damage.

CONTACT WITH THE SKIN AND EYES: Eye ; Contact with the material or exposure to vapors or mist may cause stinging, tearing, redness, and swelling. Skin; contact with the material may cause mild irritation . Prolonged or repeated contact or exposure to vapors or mists may cause redness, burning and drying and cracking of the skin.

SKIN ABSORPTION: Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INGESTION: (Breathing) Breathing high concentration of vapors or mist may cause irritation of the nose and throat. Signs of nervous system depression (e.g., headache, drowsiness, dizziness, loss of coordination and fatigue). Respiratory systems associated with pre-existing lung disorders (e.g. asthma-like conditions) may be aggravated by exposure to this material.

INGESTION : (Swallowing) While this material has a low degree of toxicity, ingestion of excessive quantities may cause irritation of the digestive tract. Signs of nervous system depression (e.g., headache drowsiness, dizziness, loss of coordination, and fatigue).

ASPIRATION HAZARD: One or more components of this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms. Symptoms associated with over-exposure to this product are as follows:

ACUTE: The most significant hazard associated with this product would be the potential for slight irritation of contaminated skin and eyes. Inhalation of dried-out particulates may also cause irritation of the nose. Headache, drowsiness, dizziness, loss of consciousness, nausea

HAZARDOUS MATERIAL INFORMATION SYSTEM

HEALTH	(BLUE)	2
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FLAMMABILITY	(RED)	3
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REACTIVITY	(YELLOW)	0
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PROTECTIVE EQUIPMENT	B
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EYES	RESPIRATORY	HANDS	BODY
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See Section 8

For routine industrial applications

CHRONIC: There are currently no known adverse health effects associated with chronic exposure to this product. Reports have associated repeated and prolonged occupational overexposure to solvents with brain and nervous system damage.

TARGET ORGANS: Respiratory symptoms associated with pre-existing lung disorders, may be aggravated by exposure to this material.

4. FIRST-AID MEASURES

SKIN EXPOSURE: If this product contaminates the skin, begin flushing with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Contaminated individual must seek medical attention if redness or irritation continues after area has been rinsed.

EYE EXPOSURE: If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes. If irritation and or redness develops seek medical attention.

INHALATION: If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and in to fresh air. If symptoms persist particulates of dried-out material of this product are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.

4. FIRST-AID MEASURES (Continued)

INGESTION: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION.

Contaminated individual must be taken for medical attention if adverse effects occur. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to physician or other health professional with contaminated individual.

5. FIRE-FIGHTING MEASURES

FLASH POINT, (method): 73F (TCC).

AUTOIGNITION TEMPERATURE: No data

FLAMMABLE LIMITS (in air by volume, %):

Lower (LEL): 1 %.

Upper (UEL): 7 %.

FIRE EXTINGUISHING MATERIALS:

Water Spray: NO Carbon Dioxide: YES

Foam: YES Dry Chemical: YES

Halon: NO Other: Not available

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapor are heavier than air and may travel along the ground or may be moved by ventilation and ignited by heat, pilot lights, other flames and ignition sources at location distant from material handling point. Never use welding or cutting torch on or near container (even empty) because product (even just residue) can ignite explosively.

SPECIAL FIRE-FIGHTING PROCEDURES: Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area, protect people, and respond with trained personnel. Absorb liquid on vermiculite, floor absorbent or other absorbent material. Eliminate all ignition sources. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Minimum Personal Protective Equipment should be gloves and goggles, as well as appropriate body protection. **Level B: which includes the use of Self-Contained Breathing Apparatus, should be worn when oxygen levels are below 19.5% or are unknown.**

Pick-up material carefully and rinse area with soap and water. Place all spill residue in a suitable container and seal. Dispose of in accordance with Federal, State and local hazardous waste disposal regulations (see Section 13, Disposal Considerations).

7. HANDLING and USE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Do not eat or drink while handling chemicals.

STORAGE AND HANDLING PRACTICES: All employees who handle this material should be trained to handle it safely. Avoid breathing particulates generated by dried out material of this product. Packages of this product must be properly labeled. Store packages in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10, Stability and Reactivity). Inspect all incoming packages before storage, to ensure they are properly labeled and not damaged.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Decontaminate equipment using soapy water before maintenance begins. Collect all rinsates and dispose of according to applicable Federal, State, or local procedures.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: Prudent practice is to ensure eyewash/safety shower stations are available near where this product is used.

RESPIRATORY PROTECTION: If workplace exposure limit(s) of product is exceeded a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. Use supplied air respiratory protection if oxygen levels are below 19.5% or during emergency response to a release of this product. If respiratory protection is required, follow the requirements of the Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), or equivalent State standards.

EYE PROTECTION: Safety glasses.

HAND PROTECTION: Wear resistant gloves for routine industrial use.

BODY PROTECTION: Wear impervious clothing and boots. Use body protection appropriate for task.

9. PHYSICAL and CHEMICAL PROPERTIES

RELATIVE VAPOR DENSITY (air = 1): > 1
SPECIFIC GRAVITY (water = 1): 0.918.

EVAPORATION RATE: Slower than ethyl ether
FREEZING/MELTING POINT: Not available.

SOLUBILITY IN WATER: Negligible
VAPOR PRESSURE: Approx. 8.0 mm Hg
pH: Not applicable.

BOILING POINT: Approx. 240-285F
ODOR THRESHOLD: Aromatic naphtha odor

COEFFICIENT WATER/OIL DISTRIBUTION: Not known. **VOC:** 5.73 LBS/G

APPEARANCE AND COLOR: Liquid, Silver paint.

HOW TO DETECT THIS SUBSTANCE (warning properties): The appearance is a distinct property of this product.

10. STABILITY and REACTIVITY

STABILITY: Stable.

DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide and other combustion products.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: This product is not compatible with strong oxidizers and strong alkalis.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Open flames, sparks and other sources of ignition and heat. Avoid uncontrolled exposure to extreme temperatures and incompatible chemicals.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: The following toxicological data are available for the components of this product:

Solvents :
Oral LD50 rat> 5000 mg/kg
Dermal LD50 rabbit> 3160 mg/kg

Aluminum:
None. No toxic effects are known.

SUSPECTED CANCER AGENT: The components of this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, CAL/OSHA, and therefore are not considered to be, nor suspected to be cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to contaminated tissue.

SENSITIZATION TO THE PRODUCT: The components of this product are not known to cause sensitization in humans.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Preexisting skin disorders may be aggravated by exposure to this product.

BIOLOGICAL EXPOSURE INDICES (BEIs): Currently, Biological Exposure Indices (BEIs) are not applicable for any component of this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce or eliminate exposure.

12. ECOLOGICAL INFORMATION

No Data

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product if unaltered by use may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

14. TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Paint
HAZARD CLASS NUMBER and DESCRIPTION: 3 Flammable.
UN IDENTIFICATION NUMBER: UN 1263
PACKING GROUP: III

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15. REGULATORY INFORMATION

SARA REPORTING REQUIREMENTS: This product is subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows:

COMPONENT	SARA 302	SARA 304	SARA 313
Xylene	NO	NO	YES
Ethylbenzene	NO	NO	YES
Aluminum (dust and fume)	NO	NO	YES
N-butyl alcohol	NO	NO	YES
	NO	NO	NO

SARA THRESHOLD PLANNING QUANTITY: Not applicable.

TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory.

CERCLA REPORTABLE QUANTITY (RQ): Xylene 100lbs, Ethylbenzene 1000lbs.

OTHER U.S. FEDERAL REGULATIONS: Not applicable.

STATE REGULATORY INFORMATION: The components of this product are covered under specific State regulations, as denoted below:

Alaska - Designated Toxic and Hazardous Substances: No.

California - Permissible Exposure Limits for Chemical Contaminants: No.

Florida - Substance List: No.

Illinois - Toxic Substance List: No.

Kansas - Section 302/313 List: No.

Massachusetts - Substance List: No.

Minnesota - List of Hazardous Substances: No.

Missouri - Employer Information/Toxic Substance List: No.

New Jersey - Right to Know Hazardous Substance List: No.

North Dakota - List of Hazardous Chemicals, Reportable Quantities: No.

Pennsylvania - Hazardous Substance List: No.

Rhode Island - Hazardous Substance List: No.

Texas - Hazardous Substance List: No.

West Virginia - Hazardous Substance List: No.

Wisconsin - Toxic and Hazardous Substances: No.

16. OTHER INFORMATION

LABELING (Precautionary Statements):

CAUTION! MAY BE HARMFUL IF INGESTED. CONTACT WITH SKIN MAY CAUSE IRRITATION. Do not taste or swallow. Avoid contact with skin. Use with adequate ventilation. Wash thoroughly after handling. Wear gloves and safety goggles when using this product. **FIRST-AID:** In case of contact, immediately flush skin or eyes with large amounts of water. If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **IN CASE OF FIRE:** Use fog, foam, dry chemical or CO₂. **IN CASE OF SPILL:** Pick-up material and rinse area with soap and water. Refer to MSDS for additional information.

PREPARED BY:

Tempil Inc.
2901 Hamilton Boulevard
South Plainfield, NJ 07080

This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of Tempil's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this product is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.