

SERMATECH INTERNATIONAL INCORPORATED

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: SermaBond 481 Part 1
Manufacturer's Name: Sermatech International Incorporated
Address: 159 South Limerick Road, Royersford, Pa 19468
Business Telephone #: 610-474-1200
Emergency Telephone #: (USA)800-424-9300 (Chemtrec) (INTERNATIONAL) 1-703-527-3887
MSDS Issue Date: 08/18/2005
Prepared By: KEVIN EDDINGER, QA Chemist

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Table with 7 columns: INGREDIENT, CAS #, WT%, ACGIH-TWA, EXPOSURE GUIDELINES OSHA-PEL, EH40, SEC 313. Rows include Aluminum metal powder, Aqueous alkali silicate, Water soluble chromium VI Compounds, and Water.

SECTION 3 - HAZARD IDENTIFICATION

HAZARD OVERVIEW
Gray odorless liquid. Product contains small amount of hexavalent chromium, a human carcinogen. Irritating to eyes and respiratory system. Harmful if swallowed. May cause irritation or sensitization by skin contact.

Potential Health Effects

- EYE: May cause irritation
SKIN: Prolonged or repeated skin contact may cause irritation or sensitization.
INGESTION: May be harmful if swallowed.
INHALATION: Irritation may result from inhalation of atomized coating. This product contains chromium VI compounds which are considered to be carcinogenic by inhalation.
CHRONIC (CANCER) INFORMATION: Contains hexavalent chromium (see Section 11).
TERATOLOGY (BIRTH DEFECTS) INFORMATION: No information
REPRODUCTION INFORMATION: No Information

=====

SECTION 4 - FIRST AID MEASURES

EYES: Flush with water for 15 minutes. If irritation persists, get medical attention.

SKIN: Immediately flush skin with water, remove contaminated clothing and wash before reuse. Severe skin contact may require medical attention.

INGESTION: Rinse mouth thoroughly with water. Do not induce vomiting. Obtain medical attention.

INHALATION: Remove victim to fresh air. Obtain medical attention.

=====

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: None

METHOD: Not applicable

FLAMMABLE LIMITS:

Lower flammable limit: Unknown

Upper flammable limit: Unknown

HAZARDOUS DECOMPOSITION PRODUCTS: Direct contact with acids or alkalis may product hydrogen gas.

EXTINGUISHING MEDIA: Carbon dioxide, sand, dry chemical.

FIRE FIGHTING INSTRUCTIONS: Coating contains aluminum powder - DO NOT USE WATER BASED EXTINGUISHING AGENTS.

=====

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb onto sand or other inert absorbent. Flush spill area with excess water.

LARGE SPILL: N/A

=====

SECTION 7 - HANDLING AND STORAGE

HANDLING: Use with adequate ventilation. Do not get on skin and clothing.

STORAGE: Shelf life is six (6) months. Pot life of mixed coating is two (2) weeks. Store at 40-90°F. On receipt of material, remove inner seal, shake container and loosen cap every two weeks to maintain pigment suspension and relieve any pressure.

=====

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: For spray booth application, booth should have minimum air flow at 150 ft/min.

RESPIRATORY PROTECTION: For spray application, use NIOSH/MSHA approved respirator or supplied air respirator.

SKIN PROTECTION: Wear gloves and other suitable protective clothing.

EYE PROTECTION: Wear approved glasses or goggles.

=====

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure (MM Hg): 23.7
Vapor Density (Air=1): 0.7 (water vapor)
Evaporation Rate (H2O)=1): 1
Appearance/Odor: Gray odorless liquid
Solubility In Water: Complete (pigment is insoluble)
Specific Gravity: approx. 1.8
VOC Content: None
pH: 10-12

=====

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: (CONDITIONS TO AVOID) Stable.
INCOMPATIBILITY: Direct contact with acids and alkalis may produce H₂ gas
HAZARDOUS DECOMPOSITION PRODUCTS: Will not occur.
HAZARDOUS POLYMERIZATION: Will not occur.

=====

SECTION 11 - TOXICOLOGICAL INFORMATION

SKIN: No specific information available. Dermal (rabbit) LD₅₀ for CrO₃ is 57 mg/kg.
INGESTION: No specific information available. Oral (rat) LD₅₀ for CrO₃ is 52 mg/kg.
INHALATION: No specific information available. Inhalation LC₅₀ for CrO₃ is 217 mg/kg.
CHRONIC/CARCINOGENICITY:CrO₃ is listed on the following: IARC: Human carcinogen Group 1; NTP:
Known human carcinogen.

=====

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data.
CHEMICAL FATE INFORMATION: No data.

=====

SECTION 13 - DISPOSAL CONSIDERATIONS

Ingredients are considered hazardous wastes. Dispose of in accordance with all applicable local, state and federal regulations.

=====

SECTION 14 - TRANSPORT INFORMATION

Proper shipping Name: High temperature coating. Not regulated.
Hazard Rating (DOT Class): Not restricted.

=====

=====

SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

OSHA: This product is considered hazardous per OSHA Hazard Communication Rule, 29CFR 1910.1200

SECTION 313: HAZARDOUS INGREDIENTS IDENTIFIED IN THE SEC 313 COLUMN OF SECTION 1 ARE TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40CFR372. THIS INFORMATION MUST BE INCLUDED IN ALL MSDS'S THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

TOXIC SUBSTANCES CONTROL ACT (TSCA): The ingredients of this product are all on the TSCA Inventory List.

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS: Toxic, Class D, Div. 2.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): All ingredients of this product are on the Domestic Substance List (DSL) and acceptable for use under the provisions of CEPA.

UK CLASSIFICATION FOR SUPPLY: Toxic.

- R36/37: Irritating to eyes and respiratory system**
- R49: May cause cancer by inhalation.**
- S23: Do not breathe spray**
- S24/25: Avoid contact with skin and eyes**
- S38: In case of insufficient ventilation, wear suitable respiratory equipment**
- S45: In case of accident or if you feel unwell, seek medical advise immediately.**

STATE REGULATIONS:

CA PROP 65: This product contains the following chemicals known to the state of California to be carcinogenic water soluble hexavalent chromium compounds.

=====

SECTION 16 - OTHER INFORMATION

SERMABOND 481 PART 1 is an air dry, aqueous alkali, silicate coating containing finely divided aluminum powder.

HMIS RATINGS:	Health	Flammability	Reactivity	
	2	1	1	
0=Minimal	1=Slight	2=Moderate	3=Serious	4=Severe

This information is furnished without warranty, expressed or implied; except that it is accurate to the best knowledge of Sermatech Intl. Inc. The above data relates only to the product listed.

=====