

**SHIELD PRODUCTS****MATERIAL SAFETY DATA SHEET**

PRODUCT NAME: Shield Products Epoxy Coating  
 PRODUCT CLASS:  
 PRODUCT CODE: SKU 20200A

HMIS RATINGS  
 H2 F3 R0

**SECTION I - MANUFACTURER IDENTIFICATION**

MANUFACTURER'S NAME: Shield Products  
 Address: 2796 Clydo Road, Jacksonville, FL 32207  
 DATE PREPARED: 04/09/01

EMERGENCY PHONE: 1-800-255-3924 (Chemtec 24 Hour  
 Emergency) INFORMATION PHONE: 904-880-6060

PREPARER: J. Hoagland

**SECTION II - HAZARDOUS INGREDIENTS**

| HAZARDOUS COMPONENT          | CAS NUMBER | OSHA PEL               | ACGIH TLV              | VAPOR PRESS mmHg @ TEMP | SARA SEC. 313 * | WT. PERCENT |
|------------------------------|------------|------------------------|------------------------|-------------------------|-----------------|-------------|
| METHYL ISOBUTYL KETONE       | 108-10-1   | 100 PPM                | 50 PPM                 | 28.0@68                 | YES             | 5 - 15      |
| XYLENE                       | 1330-20-7  | 100 PPM                | 100 PPM                | 6.0@68                  | YES             | <5          |
| TOLUENE                      | 108-88-3   | 100 PPM                | 50 PPM                 | 22.0@68                 | YES             | 5           |
| ETHYLENE GLYCOL BUTYL ETHER  | 111-76-2   | 25 PPM (Skin)          | 25 PPM (Skin)          | 0.6@68                  | YES             | 5 - 10      |
| N-BUTYL ALCOHOL              | 71-36-3    | 50 PPM                 |                        | 5.5@68                  | YES             | 5           |
| AROMATIC HYDROCARBON SOLVENT | 64742-95-6 | 100 PPM                | 100 PPM                | 2.0@68                  |                 | 5 - 10      |
| 1,2,4-TRIMETHYLBENZENE       | 95-63-6    | 25 PPM                 | 25 PPM                 | N/A                     | YES             | <5          |
| SILICON DIOXIDE              | 7631-86-9  | 20 MPPCF               | 10 MG/M3               | N/A                     |                 | 0 - 5       |
| TITANIUM DIOXIDE             | 13463-67-7 | 15 MG/M3               | 10 MG/M3               | N/A                     |                 | 0 - 35      |
| IRON OXIDE                   | 1309-37-1  | 5 MG/M3                |                        | N/A                     |                 | 0 - 5       |
| IRON OXIDE                   | 1309-37-1  | 10 MG/M3               | 10 MG/M3               | N/A                     |                 | 0 - 30      |
| BARIUM SULFATE               | 7727-43-7  | 10 MG/M3               | 10 MG/M3               | N/A                     |                 | 0 - 10      |
| STRONTIUM CHROMATE           | 7789-06-2  |                        |                        | N/A                     | YES             | 0 - 15      |
| CARBON BLACK                 | 1333-86-4  | 3.5 MG/M3              | 3.5 MG/M3              | N/A                     |                 | 0 - 5       |
| COPPER PHTHALOCYANINE        | 147-14-8   | 1 MG/M3                | 1 MG/M3                | N/A                     |                 | 0 - 2       |
| YELLOW IRON OXIDE            | 51274-00-1 | 10 MG/M3               | 10 MG/M3               | N/A                     |                 | 0 - 5       |
| CHROMIUM OXIDE               | 1308-38-9  | 1 MG/M3                | 0.5 MG/M3              | N/A                     | YES             | 0 - 35      |
| NICKEL TITANATE              | 8007-18-9  | 15 MG/M3<br>(for TiO2) | 15 MG/M3<br>(for TiO2) | N/A                     | YES             | 0 - 10      |

\* Ingredients marked YES are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act (SARA) Section 313, 40 CFR 372.

**SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS**

|                                                  |                                               |
|--------------------------------------------------|-----------------------------------------------|
| BOILING POINT: 228°F                             | APPEARANCE & ODOR: Typical paint solvent odor |
| VAPOR DENSITY: Heavier than air                  | SPECIFIC GRAVITY (H2O = 1): 1.4               |
| VOC TOTAL (lb/gal): 4.3                          | EVAPORATION RATE: Slower than ether           |
| VOC Less Water and Exempt Solvents (lb/gal): 4.3 | SOLUBILITY IN WATER: Negligible               |

**SECTION IV - FIRE & EXPLOSION HAZARD DATA**

|                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLASH POINT: 74°F                                                                                                                                                                                                                                                                                                                                                | FLAMMABLE LIMITS IN AIR BY VOLUME -                                                                                                                                                                                                          |
| METHOD USED: Seta flash                                                                                                                                                                                                                                                                                                                                          | LOWER: 0.9 UPPER: 10.6                                                                                                                                                                                                                       |
| UNUSUAL FIRE AND EXPLOSION HAZARDS:                                                                                                                                                                                                                                                                                                                              | SPECIAL FIRE FIGHTING PROCEDURES:                                                                                                                                                                                                            |
| Closed containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up. | During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention. Keep containers tightly closed. Isolate from heat, sparks, and open flame. |
| EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                              |

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Product Name: Shield Products Epoxy Coating

**SECTION V – REACTIVITY DATA**

STABILITY: Stable

CONDITIONS TO AVOID: High Temperatures

INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizing materials HAZARDOUS  
 DECOMPOSITION OR BYPRODUCTS: May produce hazardous fumes when  
 heated to decomposition as in welding.

HAZARDOUS POLYMERIZATION: Will not occur.

**SECTION VI – HEALTH HAZARD DATA****INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Anesthetic, excessive inhalation can cause irritation of the respiratory tract, or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness, coma and even asphyxiation.

**INGESTION HEALTH RISKS & SYMPTOMS OF EXPOSURE:**

Gastro intestinal irritation, nausea, vomiting and diarrhea. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly even death.

**SKIN & EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Skin: Moderate irritation, defatting, dermatitis. May be a sensitizer in some individuals. Eyes: Severe irritation, redness, tearing, blurred vision. May be a sensitizer in some individuals

**HEALTH HAZARDS (ACUTE AND CHRONIC):**

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

**SKIN ABSORPTION HEALTH RISKS & SYMPTOMS OF EXPOSURE:**

Liquid can be absorbed through the skin resulting in symptoms similar to the inhalation effects above.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:**

Exposure to petroleum solvents may aggravate preexisting dermatitis.

**CARCINOGENICITY:**

NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No

**EMERGENCY AND FIRST AID PROCEDURES:**

Skin: Wash affected areas with soap and water. Remove and launder contaminated clothing. Consult a physician if needed. Eyes: flush immediately with large amounts of water for at least 15 minutes. Take to a physician for medical treatment. Ingestion: Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Get medical help immediately.

**SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid breathing vapors. Ventilate area. Contain and remove with inert absorbent and non-sparking tools.

**WASTE DISPOSAL METHOD:**

Dispose of in accordance with local, state and federal regulations. Incinerate in approved facility. Do not incinerate closed containers.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:**

Do not store above 120 F. Store large quantities only in buildings designed to comply with OSHA 1910.106. Keep closures tight and container upright to prevent leakage. Do not store or use near heat, sparks or flame. Never use pressure to empty. Drum must not be washed out or used for other purposes. Drums of this material should be grounded pouring.

**OTHER PRECAUTIONS:**

Do not get in eyes. Avoid skin contact. Can cause allergic respiratory reaction. Do not cause allergic skin reaction. Prevent prolonged or repeated breathing of vapors or spray mist. Avoid breathing of sanding dust. Wash contaminated when clothing thoroughly. Wash skin thoroughly with soap and water after handling. Close container after each use. Do not transfer this product to unlabeled containers. Do not handle until the manufacturer's safety precautions have been read and understood. Keep out of reach of children.

**RESPIRATORY PROTECTION:****SECTION VIII – CONTROL MEASURES**

Use a NIOSH-approved respirator to prevent overexposure, when exposure exceeds occupational exposure limits (Section II). Use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors in compliance with 29 CFR 1910.134, with provision for mist removal if conditions so indicate.

**VENTILATION:**

All application areas should be ventilated in accordance to OSHA regulation 29 CFR 1910.94, 1910.107, 1910.108. Remove decomposition products formed during welding or flame cutting on surface coated with this product. If baking, vent fumes.

**PROTECTIVE****GLOVES:**

Recommended.

**EYE PROTECTION:**

Safety eyewear including splashguards or side shields recommended.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:**

Use protective outerwear and prevent prolonged skin contact with contaminated clothing.

**WORK/HYGIENIC PRACTICES:**

Avoid breathing vapors and contact with skin. Wash skin thoroughly before breaks and meals and at end of work period.

**Disclaimer: Applicator must be certified to apply product product and be issued a warranty. It is the responsibility of the Applicator or purchaser to determine the compatibility of the substrate that Shield Products are applied to. We will provide information to the best of our ability but will not warrant or be held responsible for results which we have no control over. We warrant our products fully as described.**