Revised Date: March 29, 1984

MATERIAL SAFETY DATA SHEET

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

I. Manufacturer's Name: Amchem Products, Inc.
Address (number, street): 300 Brookside Avenue
(City, state, zip code): Ambler, PA 19002
Emergency Telephone Number: (215) 628-1000
Information Supplied by: Hugh Gehman
Date: 3/24/83 Title: Coordinator of Registration and Labeling

Product Trade Name: Alodine 1500
Chemical Name & Synonyms:
Chemical Family: Formula:
Special Hazards:

II. HAZARDOUS INGREDIENTS

MATERIAL	%	TLV (Units)	MATERIAL	%	TLV (Units)
Chromic acid	3-5	0.05mg/M^3			
Ammonium fluozirconate	2-4				
Fluozirconic acid	1-3				

CONFIDENTIAL
Proprietary Information
Amchem Products, Inc.

III. PHYSICAL DATA

a. Boiling point (°F) > 212
b. Vapor pressure (mmHg)
c. Vapor density (Air = 1)
d. Solubility in water (%) Complete
e. Specific gravity (H_2O = 1) 1.04-1.06
f. Per cent volatile by volume
g. Evaporation rate (= 1)
h. Appearance & odor: Yellow orange liquid; odorless

IV. FIRE AND EXPLOSION HAZARD DATA

a. Flash point (state method, °F) None
b. Ignition temperature (°F)
c. Flammable limits in air, LEL UEL
d. Extinguishing media: Water
e. Special fire fighting procedures: None
f. Unusual fire and explosion hazards: Do not allow to come in contact with organic materials such as sawdust, rags, etc. Spontaneous combusti may result if material dries on such organic materials.

V. HEALTH HAZARD DATA

a. Physiological Properties:
1. Local effects to skin: Will burn.
2. Genetic Hazard
3. Acute oral toxicity (LD_{50} if available): Will burn mucous membranes.
4. Dermal absorption (LD_{50} if available):
5. Inhalation effects (LC_{50} if available):
6. Threshold Limit Value (or estimate) 0.05mg/M^3 based on chromic aci
7. Local effects to eyes: Will burn.

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V.

Product Name Alodine 1500

b. Emergency and First Aid Procedures:

Special Hazards

1. Ingestion: Drink milk of magnesia, aluminum hydroxide gel, or limewater followed by several glasses of water. Call a Doctor. Do not induce vomiting unless directed by a doctor.

2. Eye Contact: Flush immediately with copious amounts of water for at least 15 minutes. Call a Doctor.

3. Skin Contact: Wash with and water and rinse thoroughly. Anyone who appears to suffer skin burns from this product should be seen by a doctor.

4. Inhalation:

5. Other Health Data:

VI. REACTIVITY DATA

a. Stability: Stable X Unstable ____ Conditions to avoid:

b. Incompatible Materials: Organic materials

c. Hazardous Decomposition Products:

d. Hazardous Polymerication: May occur ____ Will not occur X Conditions to avoid:

VII. SPILL OR LEAK PROCEDURES

a. Steps to be taken for spill or leak: Transfer unspilled material to a clean polyethylene container. Treat spilled material with dilute solution of sodium metabisulfite to reduce chrome. Adjust pH to 7-8 with lime and

b. Waste disposal methods: flush to treatment plant with plenty of water and with approval of regulatory agency.

VIII. SPECIAL PROTECTION INFORMATION

a. Respiratory protection (Specify type) requirements:

b. Ventilation requirements (local exhaust, general dilution, special): Local

c. Protective gloves required: Rubber

d. Eye protection required: Safety goggles

e. Other required equipment: Rubber aprons

IX. SPECIAL PRECAUTIONS

a. Precautionary label required? If yes, please attach. Yes. Oxidizer. Amchem Warning Statement 46

b. Precautions to be taken in handling and storing: Store in a cool place away from organic materials.

c. Oth[illegible]tions:

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