4-3-91

Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

NFPA CODE 704

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: Iowa Prison Industries	EMERGENCY TELEPHONE NO.: 319-462-3547
ADDRESS (Number, Street, City, State, and ZIP Code): 406 N. High St., Anamosa, Iowa 52205	
CHEMICAL NAME AND SYNONYMS: Phosphoric Acid 25.0%	TRADE NAME AND SYNONYMS: Phosphoric Bowl Cleaner (V.P.I.)
CHEMICAL FAMILY: Inorganic Acid	FORMULA: H_3PO_4 in H_2O with Detergents 6-10-88

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Phosphoric Acid	25.0	See Back

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	275	SPECIFIC GRAVITY (H_2O=1)	1.15
VAPOR PRESSURE (mm Hg.)	6	PERCENT, VOLATILE BY VOLUME (%)	–
VAPOR DENSITY (AIR=1)	–	EVAPORATION RATE (_____ =1)	–
SOLUBILITY IN WATER	Infinite		

APPEARANCE AND ODOR: Pink Liquid with Citrus Fragrance

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): None	FLAMMABLE LIMITS	Lel	Uel

EXTINGUISHING MEDIA

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARDS: Non-Flammable

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
1 MG/M3

EFFECTS OF OVEREXPOSURE

No Record of any Exposure due to inhalation of Product

EMERGENCY AND FIRST AID PROCEDURES

Skin Contact - Flush with Water

Eye Contact - Flush with water - Get Medical Attention

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		
	STABLE	X	

INCOMPATABILITY (Materials to avoid)
Alkalies, Aluminum, Zinc

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Flush with Water

WASTE DISPOSAL METHOD

Neutralize by Passage through Limestone

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

VENTILATION		
Non Required	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES
Rubber

EYE PROTECTION
Safety Plastic Goggles

OTHER PROTECTIVE EQUIPMENT

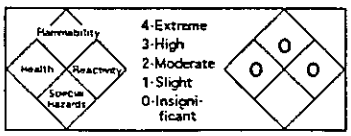
SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store in Original Container

OTHER PRECAUTIONS

GPO # 30-549
Form OSHA-21
Rev. May 72



NFPA FIRE HAZARD SYMBOL†
See NFPA 704 for detailed explanation.

MATERIAL SAFETY DATA SHEET

No.: 3587 Rev. No.: 2
Date Revised: 05/02/85

Manville

I. PRODUCT IDENTIFICATION

Trade Name(s) : PIPE & TANK INSULATION
Generic Name: FIBROUS GLASS INSULATION - Pipe + Tank
Chemical Name: NA

CAS #: NA
Formula: MIXTURE

Manufacturer: MANVILLE BUILDING MATERIALS CORP.
Address: P.O. BOX 5108
City: DENVER State: CO Zip: 80217

Telephone: (303)978-3120
Emergency:

II. PRODUCT INGREDIENTS

INGREDIENT NAME	CAS NUMBER	%	PEL and TLV (except as noted)
FIBROUS GLASS	65997-17-3	95	5mg/m³ - NUISANCE
PHENOLFORMALDEHYDE RESIN-CURED	25104-55-6	5	RESPIRABLE DUST (OSHA)

III. PHYSICAL DATA

Appearance and Odor: SEMI-RIGID FIBERGLASS BOARD WITH FOIL FACING - SLIGHT PHENOLIC ODOR.

Boiling Point: NA
Vapor Pressure: NA
Water Solubility (%) : NIL
Vapor Density (Air=1) : NA

Evaporation Rate (= 1) : NA
Specific Gravity (water = 1) : VAR
Melting Point: >1300° F
% Volatile by Volume: NA

IV. FIRE AND EXPLOSION DATA

Flash Point (Method) : NA
Flammable Limits: LEL: % UEL: NA %
Extinguishing Media: CO_2, WATER, WATER FOG, DRY CHEMICAL ABC RATED.
Unusual Fire or Explosion Hazards: RESIN AND PAPER OR PLASTIC FACINGS WILL BURN CAUSING DENSE ACRID SMOKE.

NFPA Flammable/Combustible Liquid Classification: NA
Auto-Ignition Temperature: NA

Special Fire-Fighting Procedures: USE SELF-CONTAINED BREATHING APPARATUS.

V. HEALTH HAZARDS A. Summary/Risks

Summary: CURRENT ANIMAL AND EPIDEMIOLOGICAL STUDIES INDICATE THAT GLASS FIBERS AND DUST DO NOT REPRESENT A HAZARD TO HEALTH.

THIS PRODUCT IS NOT CONSIDERED A CARCINOGEN BY NTP, IARC AND OSHA.

Medical conditions which may be aggravated: PRE-EXISTING UPPER RESPIRATORY AND LUNG DISEASES SUCH AS, BUT NOT LIMITED TO, BRONCHITIS, EMPHYSEMA AND ASTHMA.
Target Organ(s) : LUNGS & SKIN.
Acute Health Effects: IRRITATION TO SKIN AND UPPER RESPIRATORY SYSTEM.

Chronic Health Effects: NO LONG TERM EFFECTS HAVE BEEN IDENTIFIED.

Primary Entry Route(s) : INHALATION, SKIN CONTACT.

† Copyright© 1980, National Fire Protection Assoc., Quincy, MA 02269. This reprinted material is not the complete and official position of the NFPA on the referenced subject, which is represented only by the standard in its entirety.

CEP. Mech - Bldg - Const - Elec - Grounds - office

V. HEALTH HAZARDS B. Signs/Symptoms of Overexposure

Inhalation: IRRITATION OR TICKLE IN THROAT AND NOSE.

Skin Contact: TEMPORARY IRRITATION OR RASH.

Skin Absorption: NA

Ingestion: NOT HAZARDOUS WHEN INGESTED. MAY CAUSE TEMPORARY IRRITATION TO GI TRACT.

Eyes: TEMPORARY IRRITATION OR INFLAMMATION.

V. HEALTH HAZARDS C. First Aid/Emergency Procedures

Inhalation: REMOVE TO FRESH AIR. DRINK WATER TO CLEAR THROAT AND BLOW NOSE.

Skin Contact: WASH EXPOSED AREAS GENTLY WITH SOAP AND WARM WATER.

Skin Absorption: NA

Ingestion: NA

Eyes: FLUSH EYES WITH COPIOUS QUANTITIES OF WATER A MINIMUM OF 15 MINUTES. IF IRRITATION PERSISTS CONSULT A PHYSICIAN.

VI. REACTIVITY DATA

MATERIAL IS STABLE. HAZARDOUS POLYMERIZATION CANNOT OCCUR.
Chemical Incompatibilities: HYDROFLUORIC ACID.
Conditions to Avoid: NONE IN DESIGNED USE.

Hazardous Decomposition Products: CARBON DIOXIDE, CARBON MONOXIDE, CARBON PARTICULATE & TRACES OF HYDROGEN CYANIDE DERIVED FROM PYROLYSIS OF THE RESIN AS IS TYPICAL OF DECOMPOSITION OF ANY ORGANIC CHEMICAL.

VII. SPILL OR LEAK PROCEDURES

Procedures for Spill/Leak: VACUUM CLEAN DUST. IF SWEEPING IS NECESSARY USE A DUST SUPPRESSANT.

Waste Management: WASTES GENERATED DURING APPLICATION, DEMOLITION, BREAKAGE OR SPILLAGE ARE NOT HAZARDOUS WASTES AS DEFINED BY RCRA (40 CFR PART 261). COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. METHOD OF DISPOSAL-LANDFILL. RQ - N/A.

VIII. SPECIAL PROTECTION INFORMATION

Goggles: GOGGLES OR FACE SHIELDS ARE RECOMMENDED PARTICULARLY WHEN WORKING OVERHEAD.
Gloves:
Respirator: USE A MASK SUCH AS 3M 8710 OR EQUIVALENT FOR PROTECTION AGAINST NUISANCE DUST. INSURE PROPER FIT.
Ventilation: USE SUFFICIENT NATURAL OR MECHANICAL VENTILATION TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW PEL (TLV).
Other: WEAR LOOSE FITTING, LONG SLEEVED CLOTHING.

Special Considerations for repair/maintenance of contaminated equipment:

IX. SPECIAL PRECAUTIONS

Storage Segregation Hazard Classes: IRRITANT
*** ALWAYS SEGREGATE MATERIALS BY MAJOR HAZARD CLASS ***
Special Handling/Storage: KEEP MATERIAL DRY

Special Workplace Engineering Controls: NOT NORMALLY REQUIRED.

Other:

Prepared/Revised by: KENNETH A. ROBERTS **Title:** MGR., ENVIRONMENTAL SERVICES

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.