

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

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

SECTION I

MANUFACTURER'S NAME CHEM-PAC, INC.	EMERGENCY TELEPHONE NO. (305) 632-2931
ADDRESS (Number, Street, City, State, and ZIP Code) 435 GUS HIPP BLVD. ROCKLEDGE, FL 32955	
CHEMICAL NAME AND SYNONYMS FERRIC CHLORIDE	TRADE NAME AND SYNONYMS NICKEL & COPPER ETCH
CHEMICAL FAMILY INORGANIC SALT	FORMULA PROPRIATORY

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)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.) FeCl₃ 536	SPECIFIC GRAVITY (H ₂ O=1) 1.82
VAPOR PRESSURE (mm Hg.)	PERCENT VOLATILE BY VOLUME (%)
VAPOR DENSITY (AIR=1)	EVAPORATION RATE (_____=1)
SOLUBILITY IN WATER 246 gm/100 gm at 32°F	
APPEARANCE AND ODOR Brownish-yellow, odorless or slight odor of hydro-chloric a	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	LeI	UeI
EXTINGUISHING MEDIA ANY SUITABLE MEDIA TO EXTINGUISH THE SUPPORTING FIRE			
SPECIAL FIRE FIGHTING PROCEDURES NONE			
UNUSUAL FIRE AND EXPLOSION HAZARDS NONE			

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	NONE INDICATED, ORAL LD ₅₀ 900 mg/kg
EFFECTS OF OVEREXPOSURE	SLIGHT IRRITANT, SLIGHT INGESTION EFFECT.
EMERGENCY AND FIRST AID PROCEDURES	REMOVE FROM EXPOSURE

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID EXCESSIVE HEATING
	STABLE	XX	
INCOMPATIBILITY: Materials to avoid: ALLOY CHLORIDE, Na-K SOLUTIONS ARE VERY CORROSIVE			
HAZARDOUS DECOMPOSITION PRODUCTS: HYDROCHLORIC ACID LIBERATED WHEN HEATED TO DECOMPOSE			
HAZARDOUS POLYMERIZATION	MAY OCCUR		WILL REACT WITH WATER TO PRODUCE
	WILL NOT OCCUR	XX	TO PRODUCE CORROSIVE FUMES.

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: SPILLS: SPRINKLE WITH SODA AND FLUSH TO PROPER DRAIN WITH WATER. COVER WITH ABSORBER AND SODA MIX AND CONTAINERIZE FOR DISPOSAL AS HAZARDOUS WASTE.	
WASTE DISPOSAL METHOD: SMALL CONTAINERS TIGHTLY PACKAGED FOR DISPOSAL IN LANDFILL PERMITTED TO ACCEPT HAZARDOUS WASTE. LARGER QUANTITIES: DISSOLVE IN WATER IN ACID RESISTANT EQUIPMENT, NEUTRALIZE AND DISPOSE IN ACCORDANCE WITH APPLICABLE REGULATIONS.	

SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION	Specify type)	NONE	
VENTILATION	LOCAL EXHAUST	SPECIAL	
	MECHANICAL (General)	OTHER	
PROTECTIVE GLOVES	RUBBER	EYE PROTECTION	GOGGLES
OTHER PROTECTIVE EQUIPMENT: LAB CLOTHING			

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	STORE IN COOL DRY AREA
OTHER PRECAUTIONS	CORROSIVE MATERIAL, HANDLE WITH CAUTION