

MATERIAL SAFETY DATA SHEET
PENTRATE ULTRA

SECTION I - IDENTIFICATION

24 HOUR EMERGENCY ASSISTANCE:

413-452-2000 (EASTERN TIME) 8:00AM-5:00PM
800-424-9300 (OFF HOURS) CHEMTREC

HMIS HEALTH 3
HMIS FLAMMABILITY 0
HMIS REACTIVITY 1
HMIS PROTECTION X

HEATBATH CORPORATION
107 FRONT STREET
INDIAN ORCHARD, MASS. 01151

PREPARED BY: DAVID NAGY
INFORMATION: 413-452-2000
DATE REVISED: 2/24/99 REV.02

PRODUCT NAME..... PENTRATE ULTRA

DESCRIPTION..... Chemical product for producing black oxide coatings on steel.

DOT CLASS: CORROSIVE SOLIDS, N.O.S., (CONTAINS SODIUM HYDROXIDE) CLASS 8, UN 1759, PG II

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	CAS NUMBER	PEL(MG/M3)	TLV(MG/M3)	%
SODIUM HYDROXIDE	1310-73-2	2.0	2.0	80-90
SODIUM NITRITE	7632-00-0	N.E.	N.E.	1-10
SODIUM NITRATE	7631-99-4	N.E.	N.E.	10-20

N.E.=NOT ESTABLISHED

N.A.=NOT APPLICABLE

SECTION III - PHYSICAL DATA

BOILING Point(F)..... N.A. SPECIFIC GRAVITY (H2O=1).... 2.14
VAPOR PRESSURE (mm Hg).....N.A. MELTING POINT..... N.E.
VAPOR DENSITY (Air=1)..... N.A. EVAPORATION RATE.....N.A.
SOLUBILITY IN H2O..... complete. PH.....N.A.
APPEARANCE/ODOR.....odorless, off-white powder.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... None. FLAMMABLE LIMITS.....None.
LOWER FLAME LIMIT..... N.A. HIGHER FLAME LIMIT..... N.A.
IN CASE OF FIRE: Use flooding amounts of water.
SPECIAL FIREFIGHTING PROCEDURES: Wear protective clothing with self-contained breathing apparatus.
UNUSUAL FIRE HAZARDS: Prolonged contact with some metals (i.e. aluminum, tin, zinc etc.) may release flammable hydrogen gas. Contains oxidizer-increases the flammability of organics, combustibles and easily oxidizable materials.

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: STABLE CONDITIONS TO AVOID: None.
INCOMPATIBLE MATERIALS: strong acids, chlorinated hydrocarbons, leather, wool, metals such as aluminum, zinc, tin, brass etc.
DECOMPOSITION PRODUCTS: steam, hydrogen, oxides of nitrogen.
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VI - HEALTH HAZARD DATA

ROUTES OF ENTRY: inhalation, ingestion.

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HEALTH HAZARDS (ACUTE,CHRONIC): Contains STRONG ALKALI. Causes severe eye, skin and tissue burns. May be harmful or fatal if swallowed. Avoid contact with eyes, skin or clothing. Contains OXIDIZER-contact with other material may cause fire.

CARCINOGENICITY: None. NTP?: No. IARC?: No. OSHA REGULATED?: No.

SYMPTOMS OF EXPOSURE: eye, skin and respiratory tract irritation. eye, skin and tissue burns.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not known.

FIRST AID: INHALATION: Move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult,give oxygen. Get medical attention. EYES: Hold eyelids apart and flush with running water for at least 15 minutes. Get medical attention. SKIN: Wash affected area with plenty of water. Remove contaminated clothing. If irritation or burns are present, get medical attention. INGESTION: If conscious, give plenty of water. Do not induce vomiting. Get medical attention.

SECTION VII - PRECAUTIONS/PROCEDURES

IN CASE OF SPILL: Sweep up material into a chemical waste container. Neutralize spill area with a weak acid solution.

WASTE DISPOSAL METHOD: Dilute spent solutions 1:10 with water. Add Urea and mix well. Slowly add dilute acid till pH is between 7.5-8.5. Allow sludge to settle. Perform this procedure only in a well ventilated area.

PRECAUTIONS: Wear proper protective clothing when using this product. Wash thoroughly after handling. Use with adequate ventilation. When making a solution, add slowly to water with constant stirring. Store away from strong acids and combustibles.

OTHER PRECAUTIONS: Emptied containers of this product may contain hazardous vapors and residue. Clean thoroughly before reusing or discarding. Do not use a welding torch to cut container. Do not use for water or food storage. This product will generate heat when mixed with water.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirator if dust, fumes or vapors are excessive. VENTILATION: maintain below PEL, TLV.

MECHANICAL EXHAUST..... X. PROTECTIVE GLOVES: rubber.

LOCAL EXHAUST..... X. EYE PROTECTION: safety goggles, face shield.

OTHER PROTECTIVE EQUIPMENT..... apron,boots, full cover work clothes.

WORK/HYGIENIC PRACTICES..... wash thoroughly after handling,laundry clothes.

SECT IX -SARA TITLE III INFORMATION

HAZARDOUS COMPONENT	CERCLA RQ LBS.	SECT 302 TPQ LBS.	SECT 313 TOXIC	SECT.311/312 HAZARDS
SODIUM HYDROXIDE	1000	N.A.	NO	A,E
SODIUM NITRITE	100	N.A.	YES	A,C
SODIUM NITRATE	N.A.	N.A.	(SOLUTION)	A,C

A=IMMEDIATE (ACUTE) HEALTH HAZARD B=DELAYED (CHRONIC) HEALTH HAZARD
C=FIRE HAZARD D=SUDDEN RELEASE OF PRESSURE HAZARD E=REACTIVE HAZARD