FEB 04 1982 DPM 5116-1 NP-1

mfsa

Metal Finishing Suppliers' Association, Inc.

PRODUCT INFORMATION FORM

Product: Enstrip NP-1

Form ( ) Lump ( ) Granular ( ) Powder ( ) Dusty Powder ( ) Slurry (✓) Liquid

Specific Gravity 1.065 @ 70°F 8.88#/gal

Hygroscopic —

pH 8.5 (range 8.0-9.2)

Water Soluble ✓

Viscosity ?

Oxidant ✓

Boiling Point 214°F

Reducer —

Freezing Point 26°F

Odor Ammonical

Vapor Pressure (25° C) ~ 20mm Hg

Other

Shipping, Storage & Handling:

Shipping Container Glass, cubitainer, polylined fiber

Size(s) 5 15 55 gal

Repackage in Glass, Polylined steel

ICC Label(s) None

House Label(s) Keep from freezing

Storage Temperature/Conditions 110°F (Max.) 30°F (Min.)

(✓) Indoor ( ) Outdoor (✓) Dry ( ) Wet (✓) Keep from freezing
( ) Keep in "hot" room (110° F)

Shelf Life 1 year.

Avoid ( ) Light ( ) Shock ( ) Air ( ) Moisture (✓) Freezing

Corrosive to Container No

Disposal wash with water
(in case of breakage, Leakage, spillage)

Personnel Protection When Handling:

(✓) Goggles ( ) Face Shield (✓) Respirator may be required under poor general ventilation conditions ( ) Protective Ointment

Protective Clothing

( ) Apron (✓) Rubber Gloves ( ) Jacket (✓) Boots ( ) Rubber Suit

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Storage Hazards:

Flash Point (Open Cup) — (Closed Cup) —

Fire Point — Autoignition Point —

Explosibility: Temperature — Min.% Max.%

Effect of:

Heating — Volatiles Ammonia

Pressure (container heated to 130°F for 2 days) Buildup of NH_3 vapor

Pressure (container opened after 2 days at 130°F) Rapid loss of NH_3

Light — Spark —

Shock — Evaporation —

Aging gradual loss of ammonia Freezing Crystallization

Avoid Contact with:

Air Reducers ✓

Moisture Acids ✓

Oxidizers Alkalis

Others

Exothermic Reactions: Acids; reducing agents

Violent Reactions with: —

Decomposition Products in a Fire: Nitroaromatic compounds; HNO_3; NH_3; N_2; toxic nitrogen oxides

Fire Control Methods: Water

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Use:

Concentration 1 part (vol) NP-1 + 1 part (vol) NP-2 + 3 parts (vol) H_2O Temperature 70-175°F Decomposition appreciable above 140°F

pH ~ 11.2 Other

Exhaust Yes (x) Not direct Keep covered whether in use or not No ( )

Disposal Flush with water
(in case of leakage, spillage or dumping)

Tanks & Storage Containers Steel

Pumps, Filters Steel

Toxicology:

Toxicity - by ingestion

( ) Practically non toxic (Lethan Dose above 1 quart).

(✓) Slightly toxic (L.D. between 1 pint and 1 quart).

( ) Moderately toxic (L.D. between 1 ounce and 1 pint or 1 pound).

( ) Very toxic (L.D. between 1 teaspoonful and 1 ounce).

( ) Extremely toxic (L.D. between 7 drops and 1 teaspoonful).

( ) Super toxic (a taste, less than 7 drops).

( ) Not known, but probably would be rated as:

( ) Special Precautions.

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PRODUCT INFORMATION FORM

Toxicology:

Toxicity - by inhalation

(✓) Practically non-toxic

( ) Slightly toxic, low hazard for single or repeated exposures.

( ) Moderately toxic, moderate hazard for single or repeated exposures.

( ) Highly toxic, severe hazard for single or repeated exposures.

( ) Maximum atmospheric concentration (8-hour, daily exposures) recommended by ACGIH for dusts, mists, fumes, vapors:

( ) Nature of principal toxic effects:

(✓) Information not available, but toxicity is presumed to be: LOW

( ) Special Precautions:

Toxicity or Injury - by skin contact

(✓) No Systemic effects via skin absorption.

( ) Possible systemic effects via skin absorption.

( ) Severe systemic effects via skin absorption.

( ) Non-irritating to skin or mucous membranes.

(✓) May cause skin or mucous membrane irritation.

( ) Rapidly damaging to skin or mucous membranes.

( ) Special precautions.

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Tissues or Organs Affected:

(✓) Skin
(✓) Mucous membranes
(✓) Eyes
( ) Nose & Throat
( ) Oral & Dental
( ) Ears
( ) Brain
( ) Lungs
( ) Gastrointestinal
( ) Liver
( ) Genito urinary
( ) Muscles
( ) Bones
( ) Respiratory
( ) Blood
( ) Cardiovascular
( ) Nervous System

Emergency Medical Treatment

Antidote:

External

(✓) Flush area with water.
( ) Flush area with dilute acid.
( ) Flush area with dilute alkali.
( ) Other.
( ) Report to doctor.

Eyes

(✓) Wash with much water.
(✓) Report to doctor

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Antidote:

Internal

(✓) Induce vomiting

( ) Give emetics

( ) Vinegar water

( ) Sodium Bicarbonate

( ) Egg Whites

( ) Milk of magnesia, lime water, aluminum hydroxide gel.

( ) Drink much water

( ) Other

(✓) Report to doctor

The information given herein by our Corporation concerns only the product as sold by us, and may not be applicable to the product when present in a composition or mixture resulting from its use by the customer, or prepared by the customer or for the customer by a party other than our Corporation.

Date: Dec. 14, 1971

Corporation Enthone, Inc.

Signed by Curt F. Smith

Title Assistant to Technical Director

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