E.F. HOUGHTON & CO.
P.O. BOX 930 VALLEY FORGE, PA. 19482 * (215) 666-4105

MATERIAL SAFETY DATA SHEET REV DATE: 111485

310045 PERLITON 45 DPM 950-8

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SECTION I-PRODUCT IDENTIFICATION

PRODUCT NAME: PERLITON 45
PROPER SHIPPING NAME: CYANIDE OR CYANIDE MIXTURE, DRY

HAZARD CLASS: POISON B
HAZARD ID NO: UN 1588

COMPLETED BY: DAVID H EADLINE
PHONE NUMBER: 215-666-4105
MFG. DUNS # : 00-226-1535

SECTION II-HAZARDOUS COMPONENTS

MATERIAL	CAS NO	PERCENT	HAZARD
SODIUM CYANIDE(AS CN)-SKIN	143-33-9	38	TLV: 5 MG/CU.M.

SECTION III-PHYSICAL DATA

BOIL. PT.(DEG F): N/A
VAPOR PRESSURE (MM HG) N/A
VAPOR DENSITY (AIR = 1) N/A
PERCENT VOLATILE: N/A
PH NEAT: N/A PH AT %:

SPECIFIC GRAVITY: POWDER
EVAP RATE: N/A
SOL IN WATER: APPRECIABLE

APPEARANCE AND ODOR:
GRAY POWDER; SLIGHT CYANIDE ODOR OF BITTER ALMONDS

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT, DEG. F (METHOD USED): N/A LEL: UEL:
NFPA CLASSIFICATION HEALTH: 0 FIRE: 0 REACTIVITY: 0
EXTINGUISHING MEDIA:
N/A
SPECIAL FIRE FIGHTING INSTRUCTIONS:
N/A
UNUSUAL FIRE AND EXPLOSION HAZARDS:
AVOID CONTACT WITH NITRITE AND NITRATE SALTS. AVOID CONTACT WITH ACIDS. AVOID WATER CONTACT WITH MOLTEN MATERIAL

SECTION V - HEALTH HAZARD INFORMATION

ROUTES OF EXPOSURE
CHRONIC (RECURRENT) EFFECTS : UNKNOWN FOR THIS PRODUCT.

ACUTE EFFECTS :

CONTINUED ON PAGE 2

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INHALATION:
IF TLV IS EXCEEDED, SODIUM CYANIDE DUST CAN CAUSE NOSEBLEED OR NASAL ULCERATION. CAN ALSO CAUSE WEAKNESS, HEADACHE, CONFUSION

SKIN:
CYANIDE IS A DEFATTING AGENT AND CAN CAUSE DERMATITIS ON PROLONGED EXPOSURE. CAN BE ABSORBED THROUGH THE SKIN ESPECIALLY IF THERE ARE CUTS, TO CAUSE FATAL POISONING

EYE:
IRRITANT; IN THE PRESENCE OF TEARS, SYMPTOMS DESCRIBED IN INHALATION EFFECTS MAY DEVELOP

INGESTION:
POISON; MAY BE RAPIDLY FATAL. LARGER DOSES BY SWALLOWING MAY CAUSE THE PERSON TO LOSE CONSCIOUSNESS, STOP BREATHING AND DIE

********** FIRST AID **********

INHALATION:
SEE ATTACHED LABEL. IMMEDIATELY ADMINISTER AMYL NITRITE BY INHALATION. REMOVE TO SOURCE OF FRESH AIR

SKIN:
WASH THOROUGHLY WITH SOAP AND WATER

EYE:
FLUSH WITH WATER 15 MINUTES; CONSULT PHYSICIAN

INGESTION:
SEE ATTACHED LABEL (12-15, 6-332-1B)

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SECTION VI - REACTIVITY DATA

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STABILITY: STABLE: [X] UNSTABLE: [ ]

INCOMPATABILITY (MATERIALS TO AVOID):
ACIDS, NITRITE AND NITRATE SALTS; MOLTEN - AVOID WATER CONTACT

HAZARDOUS DECOMPOSITION PRODUCTS:
HYDROGEN CYANIDE

HAZARDOUS POLYMERIZATION: MAY OCCUR: [ ] WILL NOT OCCUR: [X]

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SECTION VII - SPILL OR LEAK PROCEDURES

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POTENTIAL AS A POLLUTANT:
POISON; CONTAINS CYANIDE SALT - AVOID BREATHING DUST
CAN RELEASE HYDROGEN CYANIDE GAS IF IN CONTACT WITH ACIDS

BIOCHEMICAL OXYGEN DEMAND (BOD-5): N/A

SPILL, LEAK OR RELEASE:
SWEEP UP AND PLACE IN A CLOSED, DRY CONTAINER. IF NOT REUSABLE DUE TO CONTAMINATION, CONTAINER SHOULD BE ISOLATED TO AWAIT PROPER DISPOSAL

WASTE DISPOSAL:
THIS MATERIAL IS A HAZARDOUS WASTE ON TWO COUNTS (BARIUM AND CYANIDE). WE RECOMMEND CONTACTING A DISPOSAL COMPANY QUALIFIED TO HANDLE BOTH MATERIALS

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SECTION VIII - SPECIAL PROTECTION INFORMATION

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RESPIRATORY PROTECTION:

CONTINUED ON PAGE 3

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DUST MASK OR RESPIRATOR WHEN HANDLING DRY POWDER

VENTILATION:

AS FOR MOLTEN SALT BATHS

PROTECTIVE GLOVES:

RUBBER

EYE PROTECTION:

GOGGLES

OTHER PROTECTIVE EQUIPMENT:

MOLTEN STATE; USE ASBESTOS GLOVES AND FACE SHIELD. SEE LABELS

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SECTION IX - SPECIAL PRECAUTIONS

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STORAGE AND HANDLING CONDITIONS:

STORE IN A DRY AREA TO AVOID DAMPNESS. AVOID CONTACT WITH NITRITE AND NITRATE SALTS AND ACIDS. AVOID BREATHING DUST

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ADDITIONAL PRODUCT INFORMATION

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CARCINOGENS AS DEFINED BY - NTP: NONE IARC: NONE OSHA: NONE.

RECEIVED
AUG 1 1986
OCCUPATIONAL SAFETY

Houghton's

PERLITON 45

Reg. U. S. Pat. Off.

POISONOUS SOLIDS N. O. S.

MELTING POINT—1210°F.

WORKING RANGE—1350°-1675°F.

DANGER

Under no condition allow the temperature of the bath to exceed working range shown above.

A salt bath material for liquid carburizing.

Consult the Houghton man for use and application.

STORE IN DRY PLACE!

This material must not be permitted to become damp. When ready to use, make sure it is dry.

DIRECTIONS FOR USE

Add in small quantities to the molten bath. When melting a fresh batch do not force the heat. Melt down slowly.

-332-1-B 2M 1/63

E. F. HOUGHTON & CO.

PHILADELPHIA CARROLLTON, GA. CHICAGO DETROIT SAN FRANCISCO

POISON

WARNING!

POISON

CONTACT WITH ACID LIBERATES POISONOUS GAS

Avoid breathing gas or dust. Avoid skin contact. Keep away from feed or food products. Keep container closed and store in a dry place.

DO NOT USE IN POTS FORMERLY USED FOR SALTS CONTAINING NITRATES OR NITRITES

Do not submit parts treated in this material to further treatment in salt baths containing nitrates or nitrites unless parts have been thoroughly cleaned.

THIS PRODUCT CONTAINS

CYANIDE

FIRST AID TREATMENT

Carry patient to fresh air. Have him lie down. Remove contaminated clothing, but keep patient warm. Start the following First Aid Treatment immediately and CALL A PHYSICIAN.

If patient is conscious and breathing:

(1) Break an amyl nitrite pearl in a cloth and hold lightly over the nose for not more than 15-20 seconds. Repeat every 5 minutes for 25 minutes If recovery is not forthcoming.

(2) If this product has been SWALLOWED, give patient one pint of 1% Sodium Thiosulphate solution (or soapy water or mustard water) by mouth every 15 minutes until vomiting occurs.

If patient has stopped breathing:

Give artificial respiration until breathing starts. Break an amyl nitrite pearl in a cloth and hold lightly over nose for not more than 20 seconds, repeating every 5 minutes for 25 minutes or until breathing starts.

If patient is unconscious but breathing:

Break an amyl nitrite pearl in a cloth and hold lightly over nose for not more than 20 seconds, repeating every 5 minutes for 25 minutes if recovery is not forthcoming. Give oxygen from an inhalator.

Never give anything by mouth to an unconscious person. In all cases, keep patient quiet and warm until a physician arrives.

E. F. HOUGHTON & CO., VALLEY FORGE

Chicago • Detroit • Santa Ana

12-15

Disposal of Barium Compounds

The Resource Conservation and Recovery Act (RCRA) has authorized the Environmental Protection Agency (EPA) to set standards for generators of hazardous waste materials containing barium. The maximum allowable amount of barium permitted in waste materials is 100 ppm.

A Hazardous Waste Generator is one which produces and disposes of over 1000 kg (2200 lbs) per month. A Small Quantity Waste Generator produces less than 1000 kg/month.

Products containing barium compounds may be

(1) Incinerated (if in an oil-based liquid).
(Ash must still be removed and sent to an approved landfill.)

(2) Diluted with water, if emulsifiable, and treated with sodium sulfate to produce an insoluble barium sulfate precipitate. This could be filtered out and sent to an approved landfill.

A Hazardous Waste Generator (large or small) must obtain an ID number from the EPA, before obtaining the services of an Approved Waste Transporter/Treater.