U.S. INDUSTRIAL CREMICALS CO.

Division of National Distillers and Chemical Corporation

MATERIAL SAFETY DATA SHEET

PETROTHENE (TH)

MSDS NO. NA20300 DATE 11/6/85

EMERGENCY NUMBERS:

USI: 217-253-3311 CHEMTREC: 800-424-9300

GENERAL INFORMATION:

USI: 217-253-3311

SECTION I - IDENTIFICATION

PRODUCT: Petrothene (TM) NA 203-00

SYNONYMS: Low Density Polyethylene; LDPE

FORMULA: CH2-(CH2)2-CH2

CHEMICAL FAMILY: Polyolefin

CAS RN: 9002-88-4

SECTION II - INGREDIENTS

COMPOSITION NOMINAL Z PEL/TLV HAZARD

Polyethylene 100 None None noted

SECTION III - HEALTH INFORMATION

INHALATION: Nuisance dust can be caused by handling and some operations.

Fumes may be generated in operations using heated polyethylene.

INGESTION: Not known.

EYE CONTACT: Not known.

SKIN CONTACT: The pellets can be abrasive and molten or heated material can cause serious burns to unprotected skin.

SECTION IV - OCCUPATIONAL EXPOSURE LIMITS

PEL (OSHA Permissible Exposure Limit); For nuisance dust.
15 mg/m for total dust and 5 mg/m for respirable dust.

TLV (ACGIH, Threshhold Limit Value): For nuisance particulates. 10 mg/m³ for total dust and 5 mg/m³ for respirable dust.

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SECTION V - EMERGENCY FIRST AID PROCEDURE

FOR OVER EXPOSURE BY:

SWALLOWING: No need anticipated, however if occurs call a physician or Poison Control Center promptly.

SKIN CONTACT: No need anticipated, however if occurs, wash affected area.

EYE CONTACT: No need anticipated, however if occurs call a physician promptly.

INHALATION: No need anticipated, however if occurs remove victim to fresh air. If victim has stopped breathing, give artificial respiration, preferably mouth-to-mouth and GET MEDICAL ATTENTION IMMEDIATELY.

SECTION VI - PHYSICAL DATA

BOILING POINT:

MELTING POINT:

VAPOR PRESSURE:

SPECIFIC GRAVITY:

VAPOR DENSITY (AIR-1):

SOLUBILITY IN WATER:

APPEARANCE AND ODOR:

Not applicable

Crystalline, 219-239°F' (100-115°C)

Not applicable

0.910 to 0.925 g/cc

Not applicable

Insoluble

Approximately 3/8" white to opaque solid pellets

Odorless

SECTION VII - FIRE AND EXPLOSION HAZARDS

FLASH POINT & METHOD USED: Not applicable AUTO-IGNITION TEMPERATURE:

Approx. 645°F ASTM D1929

FLAMMABLE LIMITS IN AIR, 2 BY VOL. LOWER:

Not applicable

UPPER: Not applicable NFPA RATING: HEALTH () FIRE () REACTIVITY (No NFPA rating (Does not apply to exposure hazards other than during a fire.)

FIRE FIGHTING PROCEDURES: (Note: Individuals should perform only those firefighting procedures for which they have been trained.) Use water spray, dry chemical, foam or carbon dioxide. If possible, water should be applied as a spray from a fogging nozzle since polyethylene is a surface burning material.

UNUSUAL FIRE & EXPLOSION HAZARDS: Firefighters should wear self-contained breathing apparatus in the positive pressure mode with a full facepiece when. there is a possibility of exposure to smoke, fumes or hazardous decomposition products. The application of high velocity water will spread the burning surface layer.

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SECTION VIII - REACTIVITY

STABILITY: Generally stable

HAZARDOUS POLYMERIZATION: Not likely

COMDITIONS & MATERIALS TO AVOID: May burn or react violently with fluorineoxygen mixtures with 50 to 100% fluorine.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products may include C, CO, CO₂, H₂O and organic vapors.

SECTION IX - EMPLOYEE PROTECTION

CONTROL MEASURES: Handle in the presence of adequate ventilation. Provide adequate mechanical ventilation at the points of extrusion where polyethylene is at elevated temperatures coming from extruder into dies, mold, etc.

RESPIRATORY PROTECTION: Where exposure to nuisance dust can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminant in air in accordance with OSHA 29CFR 1910.134.

PROTECTIVE CLOTHING: Wear heat protective gloves and clothing if there is potential for contact with heated material.

EYE PROTECTION: Wear safety glasses meeting the specifications of ANSI Standard 287.1

SECTION X - ENVIRONMENTAL PROTECTION

ENVIRONMENTAL PRECAUTIONS: Avoid uncontrolled releases of this material.

Where spills are possible, a comprehensive spill release response plan should be developed and implemented. If material enters a water course or sewer, advise proper authorities of possible floating polymer.

SPILL OR LEAK PROCEDURES: Normal procedures for clean up use good housekeeping practices. Wear appropriate respiratory protection and protective clothing as described in Section IX. Contain spilled material. Transfer to secure containers. In the event of an uncontrolled release of this material, the user should determine if the release is reportable under applicable laws and regulations.

WASTE DISPOSAL: All recovered material should be packaged, labeled, transported, and disposed or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

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SECTION XI - REGULATORY CONTROLS

DEPARTMENT OF TRANSPORTATION: DOT CLASSIFICATION:

DOT PROPER SHIPPING NAME:

Non-regulated commodity

OTHER DOT INFORMATION:

OTHER REGULATORY REQUIREMENTS:

Toxic Substance Control Act This product is listed in the TSCA Inventory of Chemical Substances

SECTION XII - PRECAUTIONS: HANDLING, STORAGE AND USAGE

The handling of pellets in both loading and unloading operations as well as fabrication may cause nuisance dust to be formed, and necessary precautions for personal protection (see Section IX) should be used.

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which National Distillers and Chemical Corporation bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

PREPARED BY W.E. Cash/D.S. Malin

DATE November 6, 1985

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SUPERCEDES

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