



MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

PRODUCT NAME: HD DEGREASING SOLVENT
PART # NDS1G

(NFPA RATINGS)

HEALTH: 2

FIRE: 2

REACTIVITY: 0

HMIS PROTECTIVE EQUIPMENT: X See your supervisor

PRODUCT INFORMATION (800) 262-0012	MEDICAL EMERGENCY (856) 455-4555
TRANSPORTATION EMERGENCY CHEMTREC (800) 424-9300	DISTRIBUTOR / MANUFACTURER NATIONAL REFRIGERANTS, INC. 661 KENYON AVE. ROSENHAYN, NJ

HAZARDOUS INGREDIENTS

OSHA Hazardous Components (29 CFR 1910.1200)

EXPOSURE LIMITS: 8 HR. TWA

OSHA PEL

ACGIH TLV

*Medium aliphatic solvent naphtha (CAS# 64742-88-7)

100 ppm

100 ppm recommended

Propylene glycol propyl ether (CAS# 1569-01-3)

None established

25 ppm

n-Methyl pyrrolidone (CAS# 872-50-4)

None established

100 ppm recommended

Monoethanolamine (CAS# 141-43-5)

3 ppm

3 ppm

*Aromatic hydrocarbon mixture exact composition may vary.

HAZARDS IDENTIFICATIONS

EMERGENCY OVERVIEW:

WARNING! Flammable liquid.

Irritating to eyes, skin, mucous membranes, and respiratory tract.

POTENTIAL HEALTH EFFECTS:

INHALATION: Irritating to respiratory tract, may cause difficult breathing on prolonged exposure.

EYE CONTACT: Vapors and liquids irritating to eyes.

SKIN CONTACT: Liquid irritant to skin. Product may be absorbed on prolonged contact.

INGESTION: Irritating to internal tract, may cause nausea and vomiting.

CHRONIC Effects: UNKNOWN

NOTE: Studies on test animals of n-Methyl pyrrolidone have been reported to contribute to effects of fertility (fetotoxicity).

CARCINOGENICITY: LISTED IN NTP? NO

IARC? NO

OSHA Regulated? NO

FIRST AID MEASURES

INHALATION: Remove to fresh air. If not breathing, apply artificial respiration. Keep victim warm. Seek medical advice.

EYE CONTACT: Flush with large amounts of running water for 15 minutes occasionally lifting lower and upper eyelids. Seek medical advice.

SKIN CONTACT: Wash exposed area with soap and water. Remove contaminated clothing. Seek medical advice if symptoms develop.

INGESTION: Give water. Do NOT induce vomiting. Aspiration into lungs may cause chemical pneumonia. Seek immediate medical attention. Do not give anything by mouth to an unconscious person. If spontaneous vomiting occurs, keep head below hips.

NATIONAL CHEMICALS™

FIRE FIGHTING MEASURES

FLASHPOINT (TEST METHOD): 102 °F (CC)
FLAMMABLE LIMITS: LOWER: 0.8% UPPER: 9.5%
AUTOIGNITION TEMPERATURE: 520 °F

GENERAL HAZARD: WARNING! Water may be ineffective to fight fire. Toxic gases may be produced in fire.

FIRE FIGHTING INSTRUCTIONS: Do not enter without full bunker of equipment including self contained breathing apparatus. Stay upwind, keep all personnel away. Cool fire exposed containers with water.

EXTINGUISHING MEDIA: Use carbon dioxide, alcohol foam, water spray, water fog.

HAZARDOUS COMBUSTION PRODUCTS: Smoke, fumes, oxides of carbon, and nitrogen compounds.

ACCIDENTAL RELEASE MEASURES

Isolate hazard area. Keep unnecessary and unprotected personnel away. Clean up spills and leaks immediately to prevent soil and water contamination.

LAND SPILL: Absorb spill with inert, non-combustible material, then place in a chemical waste container.

WATER SPILL: Product is a floating hazard. If possible try to contain floating material. Collect and store in a chemical waste container.

HANDLING AND STORAGE

HANDLING: Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools. Avoid skin/eye contact and breathing vapors. Empty containers retain product residue (liquid and/or vapors). DO NOT CUT, WELD, BRAZE, SOLDER, DRILL, OR EXPOSE TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY.

STORAGE: Store in a cool, dry place away from heat, ignition sources, oxidizers, and strong acids.

EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Adequate ventilation to control vapor accumulation.

PERSONAL PROTECTION: If TLV exceeded, NIOSH vapor mask recommended. Wear chemical goggles or full face shield and chemical impervious apron to protect from splashing. Wear chemical impervious gloves. Wash clothing before reuse.

PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE: <10 mmHg @ 20 °C

SPECIFIC GRAVITY: 0.75 - 0.82

SOLUBILITY IN WATER: Miscible

pH: NA

BOILING POINT: 310 °F - 340 °F

APPEARANCE & ODOR: Water-white liquid with mild amine odor.

VAPOR DENSITY (Air=1) : >2

EVAPORATION RATE (N-BUTYL ACETATE=1): <1

VOC (G/L): 820.4

FREEZING POINT: ND

STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Avoid excessive heat, ignition sources, and flames. Isolate from oxidizers and strong acids.

MATERIALS TO AVOID: Isolate from strong oxidizers such as permanganates, chromates & peroxides.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxide vapors from burning.

HAZARDOUS POLYMERIZATION: Will not occur.



TOXICOLOGICAL INFORMATION

n-Methyl pyrrolidone	LD50: 3914 mg/kg (oral-rat) LD50: 8000 mg/kg (dermal-rabbit) LD50: 3500 mg/kg (oral-rabbit)
Propylene glycol propyl ether	LD50: 2504 mg/kg (oral-rat) LD50: 3550 mg/kg (dermal-rabbit)

ECOLOGICAL INFORMATION

No Data Available.

DISPOSAL CONSIDERATIONS

Classification of waste required before disposal. Follow all local, state and federal regulations.

TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Consumer Commodity ORM-D
HAZARD CLASS:
IDENTIFICATION NUMBER:
DOT Emergency Guide #: 128
Reportable Quantity (RQ): None
International: Flammable liquids, n.o.s. (solvent naphtha, propylene glycol propyl ether), 3, UN1993, PGIII, LTD QTY

REGULATORY INFORMATION

TSCA (Toxic Substance Control Act): Components of this product are listed on the TSCA Inventory.
CERCLA (Comprehensive Environmental Response, Compensation and Liability Act): None
 We recommend you contact local authorities for other reporting requirements.
SARA TITLE III (Superfund Amendments and Reauthorization Act): Medium Aliphatic Solvent Naphtha 70-75%, Propylene Glycol Propyl Ether 20-25%
 311/312 Hazard Categories: Acute, Ignitable
 313 Reportable Ingredients: NONE
CALIFORNIA PROPOSITION 65: This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

National Refrigerants, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other methods of use of the product and of the information referred to herein are beyond the control of National Refrigerants. National Refrigerants expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

DATE OF LATEST REVISION/REVIEW: 10/06
PERSON RESPONSIBLE FOR MSDS: Ray Madariaga