



MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

PRODUCT NAME: HD DEGREASING SOLVENT
PART # : NDSIG

(NFPA RATINGS)

HEALTH: 2
FIRE: 3
REACTIVITY: 1

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

Acetone (CAS # 67-64-1)
Tetrachloroethylene (CAS # 127-18-4)
Aliphatic hydrocarbons (CAS # 8052-41-3)
Monocyclic Terpene (CAS # 5989-27-5)

OSHA PEL	ACGIH TLV
1000 ppm	750 ppm
25 ppm	25 ppm
500 ppm	100 ppm
N/E	N/E

HAZARDS IDENTIFICATIONS

EMERGENCY OVERVIEW:

WARNING! EXTREMELY Flammable liquid and vapor. Vapor may cause flash fire. Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. Affects central nervous system. Suspect cancer hazard.

POTENTIAL HEALTH EFFECTS:

INHALATION: Irritating to respiratory tract, may cause coughing, dizziness, dullness, and headache. Higher concentrations can produce central nervous system depression.

EYE CONTACT: Vapors are irritation to eyes. Splashes may cause severe irritation, with stinging, tearing, and redness and pain.

SKIN CONTACT: Irritation due to defatting of skin. Causes redness, pain, drying and cracking of the skin.

INGESTION: Possible chemical pneumonitis if aspirated into lungs and is a medical emergency.

CHRONIC Effects: (Due to excessive vapors to the raw materials) May cause cardiac abnormally, liver abnormalities, kidney and/or lung damage.

NOTE:

CARCINOGENICITY: LISTED IN NTP? NO

IARC? Suspected

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 attention.

SKIN CONTACT: Wash exposed area with soap and water. Remove contaminated clothing. If irritated, seek medical attention.

INGESTION: DO NOT INDUCE VOMITING. Call a physician immediately.

NATIONAL CHEMICALS™

FIRE FIGHTING MEASURES

FLAMMABILITY: per the USA Flame Projection Test: Extremely Flammable

FLASHPOINT (TEST METHOD): 3 °F (CC), -13 Celsius

FLAMMABLE LIMITS: LOWER: 2.5 UPPER: 12.8 (based on acetone only)

AUTOIGNITION TEMPERATURE: 490 °F (lowest based on individual components)

GENERAL HAZARD: WARNING! Product under pressure may explode from excessive heat. 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 for disposal.

WATER SPILL: Collect and store in a chemical waste container for disposal.

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) and may be hazardous; observe all warnings and precautions listed for this product. 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: 236Hg @ 21.3 C / 70.3 F

SPECIFIC GRAVITY: 1.01

SOLUBILITY IN WATER: Insoluble

pH: 3.38

BOILING POINT: 145 F / 62.6 C

APPEARANCE & ODOR: Clear, colorless liquid/citrus and solvent odor.

VAPOR DENSITY (Air=1) : >1

EVAPORATION RATE (N-BUTYL ACETATE=1): >Butyl acetate

VOC: ND

FREEZING POINT: ND

STABILITY AND REACTIVITY

STABILITY: Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID: Avoid excessive heat, ignition sources, and flames and incompatibles.

MATERIALS TO AVOID: Reactive metals, aluminum, magnesium, strong oxidizers.

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

HAZARDOUS POLYMERIZATION: CO, CO₂, HCL, small amounts of phosgene and chlorine.



TOXICOLOGICAL INFORMATION

Acetone LD50: 5800 mg/kg (oral-rat)
Tetrachloroethylene LD50: 2629 mg/kg (oral-rat), LC50: 34.2 g/m3 3/8H (inh.-rat)

ECOLOGICAL INFORMATION

Acetone LD50: 96-hr for fish >100mg/l
Tetrachloroethylene LD50: 96-hr for fish 1-10 mg/l

DISPOSAL CONSIDERATIONS

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

TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Flammable liquids, n.o.s. (acetone, tetrachloroethylene)
HAZARD CLASS: 3
IDENTIFICATION NUMBER: UN 1993
DOT Emergency Guide #: 128
Reportable Quantity (RQ): 100 lbs.
International: UN 1993, Flammable liquids, n.o.s. (acetone, tetrachloroethylene), 3, PGI

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): Acetone-5000 lbs., Tetrachloroethylene-100 lbs.
We recommend you contact local authorities for other reporting requirements.
SARA TITLE III (Superfund Amendments and Reauthorization Act): Acetone 40%, Tetrachloroethylene 30%, Medium Aliphatic Solvent Naphtha 20%
311/312 Hazard Categories: Acute, Chronic, Ignitable
313 Reportable Ingredients: Tetrachloroethylene CAS# 127-18-4
CALIFORNIA PROPOSITION 65: This product contains chemicals known to the State of California to cause cancer or reproductive toxicity.

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DATE OF LATEST REVISION/REVIEW: 10/09
PERSON RESPONSIBLE FOR MSDS: Ray Madariaga