# *NEXT HD Pro*

Preparation Date: July 1, 2021 Rev. 1

## 1. Product and Company Identification

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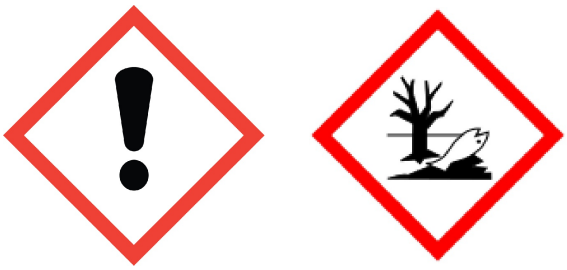
|---|---|
| Product Name: | ***NEXT HD Pro*** |
| Identified Uses: | Fluorinated Precision Cleaning Solvent |
| Supplier: | Enviro Tech International, Inc.<br>1800 N. 25th Ave.<br>Melrose Park, IL 60160 708-343-6641<br>www.envirotechint.com |
| Contact Person: | sales@envirotechint.com |
| Emergency Contact: | CHEM-TEL 24-HR EMERGENCY U.S, Canada, Puerto Rico, U.S. Virgin Islands (800) 255-3924 INTERNATIONAL CALLS: +01-813-248-0585 |
| Non-emergency number: | +01-708-343-6641 (US) |

## 2. HAZARD IDENTIFICATION

*NEXT HD Pro* has no flash point and is non-flammable per OSHA and DOT regulations. *NEXT HD Pro* does exhibit flammable limits in a range of vapor to air concentration of 5.7% to 19% (See Section 9).

**Signal Word:** **Warning**
**Appearance:** Liquid
**Color:** Clear, Colorless



**Hazard Statements**

| | |
|---|---|
| H332 | Harmful if inhaled |
| H302 | Harmful if swallowed |
| H313 | May be harmful in contact with skin |
| H315 | Causes skin irritation |
| H320 | Causes eye irritation |
| H332 | Harmful if inhaled |
| H336 | May cause drowsiness or dizziness. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Precautionary Statements**

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|---|---|
| P102 | Keep out of reach of children |
| P103 | Read label before use |
| P233 | Keep container tightly closed |
| P234 | Keep only in original container |
| P202 | Do not handle until all safety precautions have been read and understood |
| P262 | Do not get in eyes, on skin, or on clothing |
| P271 | Use in a well-ventilated area |
| P273 | Avoid release to the environment |
| P261 | Avoid breathing vapor/spray |

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| P280 | Wear protective gloves/eye protection/face protection |
| P281 | Use personal protective equipment as required. |
| P403 + P233 | Store in well-ventilated place. Keep container tightly closed |

**Classification**

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|---|---|
| Skin irritation | Category 2 |
| Eye irritation | Category 2B |
| Specific target organ toxicity (single exposure) CNS | Category 3 |
| Ingestion (Acute Toxicity) | Category 4 |
| Aquatic Toxicity | Category 4 |

**Precautionary Statements**

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|---|---|
| P308 + P314 | IF EXPOSED: Get medical advice/attention if you feel concerned. |
| P305 + P351 + P338 + P337 + P313 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. |
| P302 + P361 + P352 + P353 + P363<br>P333 + P313 | IF ON SKIN: remove immediately all contaminated clothing. Wash with soap and water. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. |
| P304 + P340 + P342 + P311 | IF INHALED: Remove individual to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. |
| P301 +P330 + P331 | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |
| P306 + P361 + P363 | IF ON CLOTHING: Remove immediately all contaminated clothing. Wash contaminated clothing. |

**Storage:**

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| P403 + P235 + P404 + P233 | Store in a well-ventilated place. Keep Cool. Store in a closed container. |

**Disposal:**

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|---|---|
| P501 | Dispose of contents/containers in accordance with all local/regional/national/international regulations. |

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| **Chemical Name** | **CAS Number** | **% by weight** |
|---|---|---|
| 1,2 trans-dichloroethylene<br>Synonym: trans-Acetylene dichloride;<br>1, 2-dichloroethylene | CAS 156-60-5 | 90 - 75 % |
| Proprietary Fluorinated Compound | | 10 - 25 % |
| 1,2 butylene oxide | CAS 106-88-77 | < 1.0 % |

The exact percentage concentration of compounds included in the NEXT HD Pro mixture has been withheld as a trade secret.

## 4. FIRST AID MEASURES

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| Inhalation: | Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Get medical attention if any discomfort continues. |
| Ingestion: | Do not induce vomiting. Never give liquid to an unconscious person. |
| Skin Contact: | Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues. |
| Eye Contact: | Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues. |

## 5. FIRE FIGHTING MEASURES

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| Flash point (° C): | None - ASTM 56 |
| Flammable Limits: | 5.7% to 19% vapor/air concentration |
| Extinguishing Media: | Use extinguishing measures appropriate to local circumstances and surroundings. |
| Unsuitable extinguishing media: | Do not use water jet as an extinguisher, as this will spread the fire. |
| Hazardous combustion products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases/vapors such as gaseous hydrogen fluoride. |
| Special Fire Fighting Procedures: | Avoid breathing fire vapors. Keep run-off water out of sewers and water sources. Dike for water control. |
| Protective Equipment: | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |

## 6. ACCIDENTAL RELEASE MEASURES

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| Personal Precautions: | Wear protective clothing as described in Section 8 of this Safety Data Sheet. |
| Environmental Precautions: | Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material. |
| Spill Clean Up Methods: | Provide ventilation and confine spill. Do not allow runoff to sewer. Dam and absorb spillage with sand, sawdust or other absorbent. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. |
| Reference to other Sections: | For personal protection, see Section 8. For waste disposal, see Section 13. |

## 7. HANDLING AND STORAGE

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| Handling: | Avoid spilling, skin and eye contact. Avoid inhalation of vapors and spray mists. Use with sufficient ventilation. In use, may form flammable/explosive vapor-air mixture. |
| Storage: | Store in tightly closed original container in a dry, cool and well- ventilated place |

## 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

| **Component** | **CAS/EC Number** | **Exposure Limits** |
|---|---|---|
| 1,2 trans-dichloroethylene | CAS 156-60-5 | OSHA PEL 200 ppm |
| 1,2 butylene oxide | CAS 106-88-77 | None |

| | |
|---|---|
| Proprietary Fluorinated Compound | 500 ppm 8h-TWA<br>Manufacturer Recommended<br>Exposure Limit |

**Engineering Controls:** Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when large amounts are released. Vapors are heavier than air. Use with adequate ventilation to prevent vapor buildup in low lying areas.

**Protective**

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| Process Conditions: | Provide eyewash, quick drench. |
| Respiratory Equipment: | Suitable respiratory protection should be provided if exposure limits may be or are exceeded. Self-contained breathing apparatus (SCBA) is required if a large spill occurs. |
| Hand Protection: | Always use Viton or neoprene gloves for long term protection. Nitrile gloves are acceptable only for splash protection. |
| Eye Protection: | Wear approved safety goggles. |
| Hygiene Measures: | When using do not eat, drink or smoke. Wear apron or protective clothing in case of splashes. |
| Skin Protection: | Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance Color: | Liquid, Colorless. |
| Boiling point: | 45.5° C / 114° F |
| Relative Density: | 1.305 @ 25° C |
| Viscosity: | 0.41 cPs* |
| Flash Point: | None. ASTM 56 |
| Flammable/Explosion Limits: | 5.7% / 19% - calculated based on 1,2 trans dichloroethylene |

## 10. STABILITY AND REACTIVITY

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| Stability: | Stable under normal temperature conditions and recommended use. Forms an azeotrope and will not flash. |
| Conditions to Avoid: | Avoid heat, flames and other sources of ignition. Does not support combustion and will decompose when exposed to extreme conditions of heat at elevated temperatures, naked flames or incompatible materials. |
| Materials to Avoid: | Strong oxidizing substances. Incompatible with alkali or alkaline earth metals-powdered Al, Zn, Be, etc. |
| Hazardous Decomposition Products: | Thermal decomposition or combustion may liberate carbon oxides, hydrochloric and hydrofluoric acids, possibly carbonyl halides and other toxic gases or vapors. |

## 11. TOXICOLOGICAL INFORMATION

### 1,2 trans-dichloroethylene

$LD_{50}$ Oral - Rat:1,235 mg/kg

$LD_{50}$ Oral - Mouse: 2,122 mg/kg Remarks: Behavioral: Altered sleep time/change in righting reflex
Behavioral: Somnolence (general depressed activity).

Behavioral: Ataxia.
$LC_{50}$ Inhalation - Rat: 24,100 ppm Remarks: Behavioral: Somnolence (general depressed activity).

A 90 day inhalation study in rats reported no adverse effects on body weight, clinical observations, food consumption, clinical or anatomical pathology parameters, or liver cell proliferation and an NOEL of 4,000 ppm.

$LD_{50}$ Dermal - Rabbit: > 5,000 mg/kg Remarks: Prolonged skin contact may cause dermatitis.
Skin: Corrosion/Irritation
Skin - Rabbit: Skin irritation - 24 h. Serious eye damage/eye irritation
Eyes - Rabbit: Eye irritation

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|---|---|
| Carcinogenicity: | Not listed in IARC, NTP or OSHA |
| Mutagenesis: | Not mutagenic to E-coli or S. Typhimurium when tested with microsomal activation. Did not produce mutations in Saccharomyces cerevisiae with or without microsomal activation. No genetic effects were reported in a vivo host mediated mutagenic assay. |
| Developmental Toxicity: | In an inhalation study in rats, significant fetal toxicity was observed only at maternally toxic concentrations (12,000 ppm). Based on the results of this study, trans-1, 2-dichloroethylene would not be considered to be a developmental toxicant. |

**Proprietary Fluorinated Compound**

Oral $LD_{50}$ - Rat >2,000mg/kg
Repeated Dose Oral Toxicity - (28 Day): NOEL 1,00 mg/kg/d

Inhalation $LC_{50}$ - Rat >24.8mg/L (301 ppm)
Repeated Dose Inhalation Toxicity (5 day): NOEL 1,800 ppm Rats exposed to 2500 or 5000 ppm for 6 hours per day for 5 days showed convulsions.
Repeated Dose Inhalation Toxicity (90 day):NOEL 1,000 ppm Rats exposed to 1,000 ppm for 6 hours per day, 5 days per week for 90 days showed no adverse effects.

Dermal $LD_{50}$ - Rat >2,000mg/kg
Skin and eye irritation: Slight irritation to eye and mucous membranes
Skin irritation (rabbit): None
Eye irritation (rabbit): Slight
Sensitization: Skin (rat): None

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|---|---|
| Genetic Studies: Ames Assay: | Negative (OECD 471 & 472) |
| Chromosomal Aberration Test: | Negative (CHL Cell) (OECD 473) |
| Carcinogenicity: | Not listed in IARC, NTP or OSHA |

**1,2 butylene oxide**

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|---|---|
| Carcinogenicity: | IARC: Group 2B NTP: N/A OSHA: N/A |

**12. ECOLOGICAL INFORMATION**

**1,2 trans-dichloroethylene**

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| Invertebrate Toxicity: | <110,000 ug/L 48 hour(s) (Mortality) Water flea (Daphnia magna) |
| Persistence and degradability: | No data available |

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| Bio accumulative potential: | No data available |
| Mobility in soil: | No data available |
| PBT & vPvB assessment: | Not conducted |
| USEPA SNAP: | Acceptable: Metals Cleaning, Electronics Cleaning, Precision Cleaning, Aerosol Solvents, Adhesives & Coatings Sectors |
| Global Warming Potential: | < 5 *EPA-450-F-16-003 • www.epa.gov/snap • December 2016* |
| VOC: | 100% |
| Other adverse effects: | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal |

**Proprietary Fluorinated Compound**

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|---|---|
| Biodegradability: | Not biodegraded (OECD 301 C) |
| Bioaccumulation: | N/D |
| Activated Sludge Study: | >100mg/L (OECD 209) |
| Fish Toxicity: | $LC_{50}$ (96 hr.) (Carp) >76 mg/L |
| Other Information: | Algal growth inhibition: $ErC_{50}$>213mg/L $EbC_{50}$>213mg/L |
| Mobility inhibition: ( | Daphnia magna): 48hr-$EC_{50}$>94mg/L |
| USEPA SNAP: | Acceptable: Metals Cleaning & Precision Cleaning Sectors |
| Global Warming Potential: | 580 |
| VOC: | Excluded from the regulatory definition of VOC |

## 13. DISPOSAL CONSIDERATIONS

Disposal Methods: Dispose of waste and residues in accordance with federal, state and local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. Do not allow runoff into sewer, waterway or ground. Do not reuse containers.

## 14. TRANSPORTATION INFORMATION

| | |
|---|---|
| General: | As a mixture, this product is not hazardous for transportation per USA DOT regulations. |
| Proper Shipping Name: | Fluorinated Precision Cleaning Solvent |

The above transportation information is valid as of the date of publication of this SDS. Given that regulatory changes are made on an ongoing basis, ETI recommends checking new transportation regulations regularly.

## 15. REGULATORY INFORMATION:

**1,2 trans-dichloroethylene**

| | |
|---|---|
| USA TSCA: | Listed in Inventory |
| USA SARA 302: | N/A |
| USA SARA 304: | N/A |
| USA SARA 313: | N/A |
| RCRA Sec. 3001 Haz. Waste: | Listed. U079, FO24 and F025 (40 CFR 261.33) |
| USA CERCLA: | Reportable quantity - 1,000 LBS (454 kgs) |
| Safe Drinking Water Act: | Subject to NPDWR: MCLG - 100 ppb MCL of 100 ppb |
| Clean Water Act Section 307(a)(1) : | Listed as toxic pollutant. Subject to effluent limitations. |
| Clean Water Act Section 304: | Included in the list of total toxic organics (TTO) (40CFR 413.02(I)). |

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|---|---|
| USEPA SNAP: | Acceptable: Metals Cleaning, Electronics Cleaning, Precision Cleaning, Aerosol Solvents, Adhesives & Coatings Sectors. ODP - 0.00024 |
| Global Warming: | < 5 - USEPA 2016 |
| VOC: | 100% |
| State Right To Know: | Massachusetts, Pennsylvania, New Jersey |
| California List of Hazardous Substances: | Listed |
| State Air Regulations Allowable Ambient Levels: | New Hampshire (Env-A 1400: Regulated Toxic Air Pollutants).<br>Rhode Island (Air Pollution Regulation No. 22) |
| Chemicals of High Concern to Children: | Minnesota (Toxic Free Kids Act Minn. Stat. 116.9401 to 116.9407). |
| California's Safer Consumer Products Program: | Listed as candidate chemical (2019) |
| California Biomonitoring: | Designated priority chemical for biomonitoring (2019). |
| Massachusetts Toxic Use Reduction Act (TURA): | Listed |
| $ROHS_3$: | Complies |
| EU REACH: | EC 205-860-2 |
| Europe EINECS: | Listed in inventory |
| Canada (DSL): | Listed in Inventory |
| Australia AICS: | Listed in Inventory |
| Korea KECI: | Listed in Inventory |
| Japan Miti (ENCS): | Listed in Inventory |
| Philippines PICCS: | Not Listed. |

**Proprietary Fluorinated Compound**

| | |
|---|---|
| USA TSCA: | Listed in Inventory |
| USA SARA 313/312: | Not subject to the reporting. |
| USA SARA 302: | N/A |
| USA SARA 304: | N/A |
| USA Clean Water Act: | N/A |
| USA CERCLA: | N/A |
| RCRA: | N/A |
| USEPA SNAP: | Acceptable: Metals Cleaning & Precision Cleaning Sectors |
| Global Warming Potential: | 580 |
| VOC: | No. Excluded from the definition of VOC. USEPA 2016 |
| Canada DSL: | Listed |
| EU EINECS/ELINCS: | Listed in Inventory |
| EU ENCS: | Listed in Inventory |
| China - IECSC: | Listed in Inventory |
| Korea - KECI: | Does not comply |
| $ROHS_3$: | Complies |
| REACH: | Listed in Inventory |
| Philippines PICCS: | Does not comply |
| NICNAS: | Does not comply |

**1,2 butylene oxide**

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|---|---|
| USA TSCA: | Listed in Inventory |
| USA SARA 302: | N/A |

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|---|---|
| USA SARA 304: | N/A |
| USA SARA 313: | Listed |
| USA CERCLA: | Reportable quantity - 100 lbs Present at 0.50 % by weight. |
| VOC: | 100 % |

**16. OTHER INFORMATION**

Only trained personnel should use this material. Since empty containers retain product residue, follow label warnings, even after container is emptied. Each user of this product should study this SDS carefully and consult appropriate expertise as necessary to become aware of and understand the data contained in this SDS and any hazards that may be associated with this product. The information provided in this Safety Data Sheet relates only to the specific material designated herein. The user is responsible for determining the conditions of safe use of this product and for complying with all Federal, State and Local governmental laws and regulations concerning its use. Enviro Tech International, Inc. makes no warranty, express or implied, including the warranty of merchantability and fitness for a particular purpose, and assumes no liability or responsibility for the accuracy, completeness, timeliness or usefulness of this information. Enviro Tech International, Inc assumes no liability for any damages incurred, whether directly or indirectly, as a result of any errors, omissions or discrepancies in this information. Enviro Tech International, Inc. assumes no liability for reliance on this data and assumes no liability for damages related to the use or misuse of this product.