NEXT HD Pro 5408

SAFETY DATA SHEET
Preparation Date: January 20, 2025

1. Product and Company Identification

Product Name:	***NEXT HD Pro 5408***
Identified Uses:	**INDUSTRIAL USE ONLY. NOT FOR CONSUMERS DALE OR USE.** Fluorinated precision cleaning solvent for electronic and precision parts cleaning; dewatering after aqueous cleaning; carrier/lubricant for other precision parts
Supplier:	Enviro Tech International, Inc. 1800 N. 25th Ave. Melrose Park, IL 60160 www.envirotechint.com
Contact Person:	sales@envirotechint.com
Emergency Contact:	Velocity EHS 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

This Product has no flash point and is non-flammable per OSHA and DOT regulations. This Product does exhibit flammable limits in an estimated range of vapor to air concentration of 6.7% to 19% based on 1,2 trans-dichloroethylene.

Signal Word: Danger

Classification

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 3

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

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
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

Precautionary Statements

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 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 & Disposal:

P403 + P235 + P404 + P233	Store in a well-ventilated place. Keep Cool. Store in a closed container.
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	CAS 156-60-5 EC 205-860-2	90 - 70 %
Proprietary Fluorinated Compound	Specific component is a Trade Secret - 920.1200(i)(1)	10 - 30 %
Proprietary Stabilizing Package		< 1 %

4. FIRST AID MEASURES

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

Flash point (° C):	None - Mixture Tested ASTM 56
Flammable Limits:	6.7% to 19% (estimated based on 1,2 trans-dichloroethylene)
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

Personal Precautions:	Wear protective clothing as described in Section 8 of this SDS.
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:	Personal protection, see Sec. 8. Waste disposal, see Sec. 13.

7. HANDLING AND STORAGE

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 EC 205-860-2	OSHA PEL 200 ppm ACGIH TLV 200 ppm
Proprietary Fluorinated Compound		50 ppm 8hr TWA Manufacturer Recommended

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	
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

Physical state:	Liquid
Color.:	Clear and Bright
Odor:	Characteristic
Odor Threshold:	No data available
Melting point/freezing point:	No data available
Boiling point:	45.5° C / 114° F
Flammability:	Non-flammable
Lower/upper flammability limit:	6.9% to 17.7% ASTM E918
Flash point:	None ASTM 56
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH	No data available
Kinematic viscosity:	0.439cPs @ 20°C
Solubility:	No data available
Partition coefficient n-octanol/water (log value):	No data available
Vapor pressure:	7.1 psi @ 20°C
Relative density:	1.272
Relative vapor density:	No data available
Particle characteristics:	No data available
KB Value:	94
Heat Capacity:	0.270 cal/g @ 20° C (Based on 1,2 trans dichloeoethylene)

10. STABILITY AND REACTIVITY

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	Rabbit: Skin irritation - 24 h. Serious eye damage/eye irritation
Eyes	Rabbit: Eye irritation
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 >2,000 mg/kg
Repeated Dose Oral Toxicity	NOEL 1,000 mg/kg/d (28 Day):
Inhalation LC_{50}	Rat >24.8 mg/L (301 ppm)
Repeated Dose Inhalation Toxicity	NOEL 1,800 ppm. Rats exposed to 2,500 or 5,000 ppm for 6 hours per day for 5 days showed convulsions.
Repeated Dose Inhalation Toxicity	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 >2,000 mg/kg
Skin and eye irritation:	Slight irritation to eye and mucous membranes
Skin irritation (rabbit):	None
Eye irritation (rabbit):	Slight
Sensitization: Skin (rat):	None
Genetic Studies: Ames Assay:	Negative (OECD 471 & 472)
Chromosomal Aberration Test:	Negative (CHL Cell) (OECD 473)
Carcinogenicity:	Not listed in IARC, NTP or OSHA

Proprietary Stabilizer Package

Acute oral toxicity LD_{50}:	Rat - 900 mg/kg
Acute dermal toxicity LD_{50}	Rabbit - > 1,500 - < 2,950 mg/kg
Acute inhalation toxicityLC_{50}:	Rat (male & female): 4 Hour, vapor, > 6.3 mg/l.
Skin corrosion/irritation:	Prolonged or repeated contact may cause skin burns and a more severe response if skin is abraded (scratched or cut) or covered (under clothing, gloves). Did not cause allergic skin reactions when tested in guinea pigs.
Eye Irritation:	May cause serious to moderate eye irritation. May cause slight corneal injury.

Specific Target Organ Systemic Toxicity (Single Exposure - Inhalation):	May cause respiratory tract irritation.
Specific Target Organ Systemic Toxicity (Repeated Exposure):	In animals, peripheral nervous system & respiratory tract.
Mutagenicity:	In vitro genetic toxicity studies were positive. Animal genetic toxicity studies were negative.
Carcinogenicity:	Shown to produce benign and malignant tumors in rats but not mice. These tumors occurred only following high exposure levels which first produced chronic upper respiratory tract irritation
Reproductive & Developmental:	Limited data in test animals suggest that the material does not affect reproduction. Did not cause birth defects or fetal effects in test animals.

12. ECOLOGICAL INFORMATION

1,2 trans-dichloroethylene

Invertebrate Toxicity:	<110,000 ug/L 48 hour(s) (Mortality) Water flea (Daphnia magna)
Persistence and degradability:	No data available
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 - Not listed as GWP in EU
VOC:	100%
Other adverse effects:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Proprietary Fluorinated Compound

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

Proprietary Stabilizer Package

Acute toxicity to fish:	Material is slightly toxic to aquatic organisms on an acute basis (LC_{50}/EC_{50} between 10 and 100 mg/L in the most sensitive species tested).
LC_{50}	Leuciscusidus (Golden orfe), static test, 96 Hour > 100 mg/I
Acute toxicity to aquatic invertebrates EC_{50}:	Daphnia magna (Water flea), static test, 48 Hour, 70 mg/I, OECD Test Guideline 202 or Equivalent

Acute toxicity to aquatic plants ErC_{50}:	Desmodesmus subspicatus (green algae), 72 Hour, Growth rate inhibition, > 500 mg/I
Toxicity to bacteria $EC_{50:}$	Activated sludge, static test, 0.5 Hour, Respiration rates, 900 mg/I (OECD 209)
Biodegradability:	Material is readily biodegradable. Passes OECD test for ready biodegradability.
10-day Window:	Pass
Biodegradation:	90%. Exposure time: 28 d. Method: OECD 310 or Equivalent
Theoretical Oxygen Demand:	2.44 mg/mg
Stability in Water (1/2-life)	Hydrolysis, half-life, 11 d
Photodegradation	Atmospheric half-life: 6 days (estimated)
Bioaccumulation:	Does not accumulate in organisms. Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient:	n-octanol/water (log Pow) - 0.68 at 25 °C
Mobility in soil:	K_{OC} between O and 50
Partition coefficient (Koc):	4.49 Estimated.

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:	Not hazardous for transportation per USA DOT regulations.
Proper Shipping Name:	Fluorinated Precision Cleaning Solvent

15. REGULATORY INFORMATION:

GWP NEXT HD Pro - Mixture:	87
USEPA SNAP - Mixture:	All compounds approved
VOC Content	1081 g/L

1,2 trans-dichloroethylene

USA TSCA:	Listed in Inventory. Active.
USA HAP:	Not Listed.
USA SARA 302:	Not subject to the reporting requirements,
USA SARA 304:	N/A
USA SARA 313/312:	Hazards: Serious eye damage or eye irritation.
USA SARA 313:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III, Section 313.
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:	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)).
USEPA SNAP:	Acceptable: Metals Cleaning, Electronics Cleaning, Precision Cleaning, Aerosol Solvents, Adhesives & Coatings Sectors. ODP - 0.00024
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). 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 Bio-monitoring:	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
Canada WHMIS:	B2, D2B. Not listed on Ingredient Disclosure List
Canada CEPA:	Not Listed
Australia AICS:	Listed in Inventory
Korea KECI:	Listed in Inventory
Japan ENCS:	Listed in Inventory
Philippines PICCS:	Not Listed.

Proprietary Fluorinated Compound

USA TSCA:	Listed in Inventory. Active. Subject to SNUR - Requirements as specified in § 721.80 (f), (j) (cleaning electronic components; precision cleaning; dewatering of electronic components and other parts following aqueous cleaning; and carrier/lubricant coating for hard disk drives and other precision parts). 40 CFR 721.10549. Subject to export reporting.
USA SARA 313/312:	Not subject to the reporting.
USA SARA 302:	Not subject to the reporting.
USA SARA 304:	N/A
USA CERCLA:	Not regulated.
USA RCRA:	N/A
USEPA SNAP:	Acceptable: Metals Cleaning & Precision Cleaning
GLOBAL WARMING:	GWP: 580
California Prop 65:	Not Listed.
$ROHS_3$:	Complies.
Canada DSL:	Listed in Inventory.
REACH:	Listed in Inventory.
EU EINECS/ELINCS:	Listed in Inventory.
EU ENCS:	Listed in Inventory.
EU F-GAS:	Subject to Reporting.
China IECSC:	Listed in Inventory.
Korea KECI:	Listed in Inventory.

Philippines PICCS:	Listed in Inventory.
Australia AICS:	Does not comply.

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.

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