

MATERIAL SAFETY DATA SHEET

Revised 2/12/13

PurCheck™ **HSI FIRE & SAFETY GROUP LLC**

01. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER: HO-30S
PRODUCT NAME: PurCheck™
PRODUCT DESCRIPTION: Aerosol
PRODUCT CODE: FG #16506

COMPANY NAME:
HSI Fire & Safety Group LLC
107 Garlisch Drive
Elk Grove Village, IL 60007-1322
(847) 427-8340
Fax (847)-427-8343

MANUFACTURED FOR HSI FIRE & SAFETY GROUP LLC, AT:
Shield Packaging Co., Inc
50 Oxford Ave. Dudley, MA 01571-3262
(508) 949-0900
Fax (508)-943-1473

24 HR. EMERGENCY TELEPHONE NUMBER: CHEMTREC 800-424-9300
24 HR. EMERGENCY INTERNATIONAL TELEPHONE NUMBER: CHEMTREC 703-527-3887

02. COMPOSITION

CHEMICAL NAME	%	OCCUPATIONAL EXPOSURE LIMITS		Vapor Pressure
		TLV	TWA	
HFO 1234ze(E) (trans-1,3,3,3-Tetrafluoroprop-1-ene) CAS-No. : 1645-83-6 EC-No. : 471-480-0	98		800 ppm	49.0 psig @ 70° F
Proprietary	2	None		

03. HAZARD IDENTIFICATION

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.
Rapid evaporation of the liquid may cause frostbite.

POTENTIAL HEALTH EFFECTS

EYES:

May cause stinging, tearing, redness, swelling and blurred vision. Possible burns similar to frost bite could occur with sustained spraying on eyes.

SKIN:

May cause irritation and stinging. Possible burns similar to frost bite could occur with sustained spraying on skin.

INGESTION:

Not a likely route of exposure. May be harmful if swallowed.

INHALATION:

Symptoms may include headache, dizziness, nausea, palpitation, respiratory disorders, and rapid respiration.

CHRONIC:

None known

04. FIRST AID MEASURES

EYES:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. If irritation persists, call a poison control center or doctor for treatment advice.

SKIN:

Remove contaminated clothing. Rapid evaporation of the liquid may cause frostbite. If there is evidence of frostbite, bathe (do not rub) with lukewarm (not hot) water. If water is not available, cover with a clean, soft cloth or similar covering. Call a physician if irritation develops or persists.

INGESTION:

Not a likely route of exposure. If swallowed do not induce vomiting. Seek immediate medical attention. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe lung injury.

INHALATION:

If inhaled, remove to fresh air. Get medical attention if irritation develops and persists. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice.

Note to Physician: Inhalation symptoms include headache, dizziness, nausea, palpitation, respiratory disorders, and rapid respiration. Treat frost-bitten areas as needed.

05. FIRE FIGHTING MEASURES

Flammability rating (Aerosol):

2,0,0 (Health = 2, Flammability = 0, Reactivity = 0). Nonflammable.

Flashpoint (dispensed liquid):

None

Autoignition temperature:

368°C (694° F)

EXTINGUISHING MEDIA:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water, mist, dry powder, foam, CO₂.

HAZARDOUS COMBUSTION PRODUCTS:

Fire may cause evolution of Hydrogen Fluoride and fluorocarbons.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Aerosol cans may burst at temperatures above 120° F. Fire or intense heat may cause violent rupture of packages. This product is not combustible under normal conditions. However, this material can ignite when mixed with air under pressure and exposed to strong ignition sources.

FIREFIGHTING PROCEDURES:

Evacuate personnel in the general area. Use water to cool material stored in vicinity of fire and remove aerosol cans from danger soon as possible. Aerosol cans may burst at temperatures above 120° F. If aerosol cans are bursting, stay clear until bursting is completed. Aerosols cans could act like projectiles when bursting. Isolate from oxidizers, open flames, sparks, heat, electric equipment and other sources of ignition.

06. ACCIDENTAL RELEASE MEASURES

SMALL SPILL:

Ventilate area. Avoid prolonged skin contact with leaking liquid (danger of frostbite). This product evaporates readily. Allow to evaporate.

LARGE SPILL:

Evacuate area. Ventilate area. Avoid prolonged skin contact with leaking liquid (danger of frostbite). Use personal protective equipment (gloves, apron and footwear impervious to this material). Keep people away from and upwind of spill/leak. Do not direct water spray at the point of leakage. This product evaporates readily. Allow to evaporate.

ENVIRONMENTAL PRECAUTIONS:

Prevent further leakage or spillage. Prevent spreading over a wide area (e.g. by containment or oil barriers).

07. HANDLING AND STORAGE

GENERAL PROCEDURES:

HANDLING:

Avoid inhalation of vapor or mist. Use only with adequate ventilation. Do not get in eyes, on skin or on clothing. Product should be kept at temperatures below 120° F in a dry, cool area. Protect from sunlight. Do not pierce or burn containers, even after use.

STORAGE:

Store in a cool, dry area at temperatures below 120° F. Do **NOT** store near oxidizing agents. Fire or intense heat may cause violent rupture of packages.

Level 1 Aerosol

KEEP OUT OF THE REACH OF CHILDREN

08. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

<u>CHEMICAL NAME (CAS #)</u>	<u>OSHA</u>	<u>ACGIH</u>	<u>Time Weighted</u>
	<u>(PEL)</u>	<u>(TLV)</u>	<u>Average (TWA)</u>
trans-1,3,3,3-Tetrafluoroprop-1-ene			800 ppm
CAS-No. : 1645-83-6			
EC-No. : 471-480-0			

ENGINEERING CONTROLS:

Mechanical ventilation should be used when handling this product in enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT:

Take precautions to avoid contact with eyes, face and skin.

RESPIRATORY:

Use in well ventilated areas. Take precautions to avoid breathing vapors or spray mist of this product.

**DO NOT SMOKE, EAT, OR DRINK WHILE SPRAYING THIS PRODUCT.
OBSERVE NORMAL HYGIENIC PRACTICES.**

09. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid in pressurized aerosol can
BOILING RANGE (Aerosol):	-19° C (-2.2° F)
FREEZING POINT:	Not determined for aerosol
COLOR:	Clear, Colorless Gas
SPECIFIC GRAVITY (H2O = 1):	1.16 at 70° F
pH:	N/A
VAPOR PRESSURE:	49 psi-g at 70° F
VOLATILE BY VOLUME - %:	< 100
VAPOR DENSITY (AIR=1):	> 1
EVAPORATION RATE (water = 1):	> 1
APPEARANCE AND ODOR:	Clear, colorless, with slight ether-like odor.
SOLUBILITY IN WATER:	Insoluble
VISCOSITY:	Not determined for aerosol
VOC:	None (USA). 98.0% (EUR).

10. STABILITY AND REACTIVITY

STABLE:

Yes

HAZARDOUS POLYMERIZATION:

Will NOT occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Hydrogen fluoride.

CONDITIONS TO AVOID:

Open flame, heat, sparks, electrical equipment or any means which can cause high temperatures at or above 120° F.

MATERIALS TO AVOID:

Strong oxidizing agents or reducing agents, strong acids and bases.

11. TOXICOLOGICAL INFORMATION

ACUTE**DERMAL LD₅₀:** N/D**ORAL LD₅₀:** N/D**INHALATION LC₅₀:** N/D

This product should provide minimal risk to users. Do not inhale. Use only with adequate ventilation.

EYE EFFECTS:

This product should provide minimal risk to users. Do not spray directly on eyes, as frostbite could occur due to the rapid evaporation of the propellant.

SKIN EFFECTS:

This product should provide minimal risk to users. Do not spray directly on the skin, as frostbite could occur due to the rapid evaporation of the propellant.

SENSITIZATION:

N/D

COMMENTS:

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

12. ECOLOGICAL INFORMATION**ENVIRONMENTAL DATA:**

Not determined.

ECOTOXICOLOGICAL INFORMATION:

Not determined.

13. DISPOSAL CONSIDERATIONS**DISPOSAL METHOD:**

Wastes resulting from the use of this product must be disposed of at an approved waste disposal facility.

EMPTY CONTAINER/PACKAGING:

Do **NOT** puncture or incinerate empty aerosol cans. Dispose of in accordance with procedures approved by State and Local authorities. Legal requirements in regard of disposal of unused packaging materials.

RCRA/EPA WASTE INFORMATION:

None of the ingredients in this product appear on the RCRA lists (40 CFR 261.24, 40 CFR 251.33) or CERCLA Hazardous Substance list (40 CFR Part 302 Table 302.4).

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)****BY LAND:**

CARTON MARKED WITH PROPER SHIPPING NAME: Consumer Commodity. Hazard Class: ORM-D

BY WATER VESSEL (IMO/IMDG):

PROPER SHIPPING NAME: UN1950, Aerosols, 2.1, Ltd. Qty. Label: None. Hazard Class: ORM-D
(Level 1 Aerosol)

AIR (ICAO/IATA):

PROPER SHIPPING NAME: ID8000, Consumer Commodity, 9. Label: Miscellaneous Dangerous Goods.
(Packaging instruction 200)

PRIMARY HAZARD CLASS/DIVISION: N/D

OTHER SHIPPING INFORMATION: N/D

15. REGULATORY INFORMATION**U.S. FEDERAL, STATE and LOCAL REGULATORY INFORMATION:**

This product and/or its constituents listed herein are on the EPA TSCA inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other federal, state or local regulations. Consult those regulations applicable to your operation.

CLEAN WATER ACT:

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (800-424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

SARA SECTION 311/312 HAZARD CATEGORIES:

<u>ACUTE HEALTH</u>	<u>CHRONIC HEALTH</u>	<u>FIRE</u>	<u>SUDDEN RELEASE OF PRESSURE</u>	<u>REACTIVITY</u>
YES	NO	YES	YES	NO

SARA SECTION 313 REPORTABLE INGREDIENTS:

This product contains no toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 49 CFR 372.

<u>COMPONENT</u>	<u>CAS #</u>	<u>MAX %</u>
None	None	0

See **Section 03. HAZARD IDENTIFICATION**, for potential health risks.

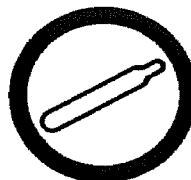
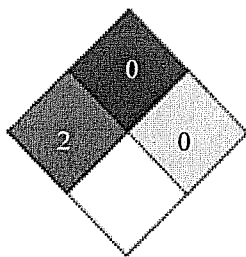
SARA SECTION 302/304 EMERGENCY PLANNING**EMERGENCY PLAN:**

There are no SARA Title III Section 302 extremely hazardous substances present in this product (40 CFR 355)

VOLATILE ORGANIC COMPOUNDS (VOC): None (USA). 98.0% (EUR).

16. OTHER INFORMATION**Flammability rating (Aerosol):**

2,0,0 (Health = 2, Flammability = 0, Reactivity = 0). Nonflammable.



Global Warming Potential (GWP) = 6.0

The information contained in this Material Safety Data Sheet is furnished without warranty of any kind, expressed or implied. Information in this Data Sheet has been assembled by the manufacturer based on its own studies and on the work of others and is believed to be correct as of the date issued. However, no warranty of any kind is expressed or implied as to the accuracy, completeness, or adequacy of the information obtained herein. The Manufacturer shall not be liable, regardless of fault, to the vendee, the vendee's employees, or anyone for any direct, special or consequential damages arising out of, or in connection with, the accuracy, completeness, or adequacy of the information obtained herein. It is intended to assist in the normal safe usage of the product.