

# PurCheck

## Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.  
Issue date: 4/22/2024 Revision date: 4/22/2024 Version: 1.0

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Trade name : PurCheck  
Product code : Not available  
Vaporizer : Aerosol

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Main use category : Industrial use  
Use of the substance/mixture : Smoke alarm tester

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Manufacturer

HSI Fire and Safety Group, LLC  
1424 Armour Blvd  
Mundelein, IL 60060  
U.S.A.  
T +1 (847) 427-8340 - F +1 (847) 427-8343  
hsi@hsifiresafety.com

##### Distributor

SafetyOnline B. V.  
HSI Europe  
Noord 49E  
2931 SJ Krimpen aan de LEK  
The Netherlands

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to GB CLP (SI 2019:720 as amended)

Aerosol, Category 3 H229  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

##### Labelling according to GB CLP (SI 2019:720 as amended)

Signal word (GB CLP) : Warning  
Hazard statements (GB CLP) : H229 - Pressurised container: May burst if heated.  
Precautionary statements (GB CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.  
P251 - Do not pierce or burn, even after use.  
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

#### 2.3. Other hazards

Other hazards which do not result in classification : May displace oxygen and cause rapid suffocation.

This substance/mixture does not meet the PBT criteria of UK REACH regulation, Annex XIII  
This substance/mixture does not meet the vPvB criteria of UK REACH regulation, Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP at a concentration equal to or greater than 0,1 %

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Labelling according to GB CLP (SI 2019:720 as amended)
1-Propene, 1,3,3,3-tetrafluoro-, (1E)- Disclosure necessary for safe use	CAS-No.: 29118-24-9	80 - 100	Press. Gas (Liq.), H280

Product subject to CLP Article 1.1.3.7. The disclosure rules of the components is modified in this case.

Full text of H- and EUH-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation	: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists. Thaw frosted parts with lukewarm water. Do not rub affected area.
First-aid measures after eye contact	: 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. Thaw frosted parts with lukewarm water. Do not rub affected area.
First-aid measures after ingestion	: Not a normal route of exposure. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May cause respiratory tract irritation. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death.
Symptoms/effects after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquefied gas.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquefied gas.
Symptoms/effects after ingestion	: Not a normal route of exposure. May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use water jet.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable. If pyrolysed by fire from another source, products of decomposition may include, and are not limited to: oxides of carbon, hydrogen fluoride, carbonyl fluoride.

### 5.3. Advice for firefighters

Protection during firefighting : Use water spray to keep fire-exposed containers cool. Use water spray to disperse the vapours. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate sources of ignition. Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear recommended personal protective equipment.

Methods for cleaning up : Provide ventilation. Allow the residual product to evaporate.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Pressurised container: May explode if heated. Use only in well-ventilated areas. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 122°F (50°C).

Incompatible materials : Refer to Section 10 on Incompatible Materials.

### 7.3. Specific end use(s)

Smoke alarm tester.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

No additional information available

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

###### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### 8.2.2. Personal protection equipment

###### 8.2.2.1. Eye and face protection

###### Eye protection:

Safety glasses or goggles are recommended when using product.

###### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing

###### Hand protection:

Wear suitable gloves

###### 8.2.2.3. Respiratory protection

###### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

###### 8.2.2.4. Thermal hazards

###### Thermal hazard protection:

Use personal protective equipment as required.

##### 8.2.3. Environmental exposure controls

###### Environmental exposure controls:

Avoid release to the environment.

###### Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Appearance	: Aerosol.
Odour	: Odourless.
Odour threshold	: Not available

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Melting point	: < -75 °C (< -103 °F)
Freezing point	: Not available
Boiling point	: -19.4 °C (-3 °F)
Flammability	: Not flammable
Explosive limits	: None
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: None
Auto-ignition temperature	: > 462 °C (> 863 °F)
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: < 0.6 cP @ 21.1 °C (70 °F)
Solubility	: Water: 0.008 % @ 21.1 °C (70 °F)
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water	: 1.43
Vapour pressure	: 3.24 bar @ 21.1 °C (70 °F), 47 psig; 9.66 bar @ 54.4 °C (130 °F), 140 psig
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.17 g/ml @ 21.1 °C (70 °F); 1.06 g/ml @ 54.4 °C (130 °F)
Relative vapour density at 20°C	: 4 @ 21.1 °C (70 °F)
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

% of flammable ingredients : 0 %

#### 9.2.2. Other safety characteristics

Relative evaporation rate (ether=1) : > 1

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2. Chemical stability

Stable under normal conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn.

### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### 10.4. Conditions to avoid

Sources of ignition. Direct sunlight. Moisture. Heat. Incompatible materials.

### 10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

### 10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. Hydrogen fluoride. Carbonyl fluoride.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified. (Based on available data, the classification criteria are not met.)
Acute toxicity (dermal)	: Not classified. (Based on available data, the classification criteria are not met.)
Acute toxicity (inhalation)	: Not classified. (Based on available data, the classification criteria are not met.)

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### 1-Propene, 1,3,3,3-tetrafluoro-, (1E)- (29118-24-9)

LC50 inhalation rat	> 207000 ppm/4h
Skin corrosion/irritation	: Not classified. (Based on available data, the classification criteria are not met.)
Serious eye damage/irritation	: Not classified. (Based on available data, the classification criteria are not met.)
Respiratory or skin sensitisation	: Not classified. (Based on available data, the classification criteria are not met.)
Germ cell mutagenicity	: Not classified. (Based on available data, the classification criteria are not met.)
Carcinogenicity	: Not classified. (Based on available data, the classification criteria are not met.)
Reproductive toxicity	: Not classified. (Based on available data, the classification criteria are not met.)
STOT-single exposure	: Not classified. (Based on available data, the classification criteria are not met.)
STOT-repeated exposure	: Not classified. (Based on available data, the classification criteria are not met.)
Aspiration hazard	: Not classified. (Based on available data, the classification criteria are not met.)

### PurCheck

Vaporizer	Aerosol
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### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %
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#### 11.2.2. Other information

Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye
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## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: May cause long-term adverse effects in the aquatic environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified. (Based on available data, the classification criteria are not met.)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified. (Based on available data, the classification criteria are not met.)

### 12.2. Persistence and degradability

### PurCheck

Persistence and degradability	Not established.
1-Propene, 1,3,3,3-tetrafluoro-, (1E)- (29118-24-9)	
Persistence and degradability	Rapidly degradable

### 12.3. Bioaccumulative potential

### PurCheck

Partition coefficient n-octanol/water	1.43
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

No additional information available

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### 12.5. Results of PBT and vPvB assessment

#### PurCheck

This substance/mixture does not meet the PBT criteria of UK REACH regulation, Annex XIII

This substance/mixture does not meet the vPvB criteria of UK REACH regulation, Annex XIII

### 12.6. Other adverse effects

Adverse effects on the environment caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.
Additional information	: No other effects known

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
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## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

UN-No. (ADR)	: UN 1950
UN-No. (IMDG)	: UN 1950
UN-No. (IATA)	: UN 1950
UN-No. (ADN)	: UN 1950
UN-No. (RID)	: UN 1950

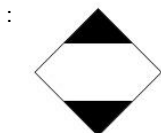
### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: AEROSOLS (Non flammable Limited quantity)
Proper Shipping Name (IMDG)	: AEROSOLS (Non flammable Limited quantity)
Proper Shipping Name (IATA)	: Aerosols, non-flammable (Non flammable Limited quantity)
Proper Shipping Name (ADN)	: AEROSOLS (Non flammable Limited quantity)
Proper Shipping Name (RID)	: AEROSOLS (Non flammable Limited quantity)

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 2.2
Danger labels (ADR)	: 2.2



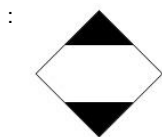
#### IMDG

Transport hazard class(es) (IMDG)	: 2.2
Danger labels (IMDG)	: 2.2

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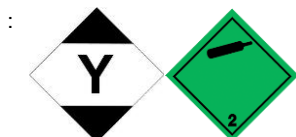
### IATA

Transport hazard class(es) (IATA)

: 2.2

Danger labels (IATA)

: 2.2



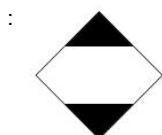
### ADN

Transport hazard class(es) (ADN)

: 2.2

Danger labels (ADN)

: 2.2



### RID

Transport hazard class(es) (RID)

: 2.2

Danger labels (RID)

: 2.2



## 14.4. Packing group

Packing group (ADR)

: Not applicable

Packing group (IMDG)

: Not applicable

Packing group (IATA)

: Not applicable

Packing group (ADN)

: Not applicable

Packing group (RID)

: Not applicable

## 14.5. Environmental hazards

Dangerous for the environment

: No

Marine pollutant

: No

Other information

: No supplementary information available.

## 14.6. Special precautions for user

Special transport precautions

: Do not handle until all safety precautions have been read and understood.

### Overland transport

No data available

### Transport by sea

No data available

### Air transport

No data available



### Inland waterway transport

No data available

### Rail transport

No data available

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. United Kingdom

British National Regulations : Not determined.

##### UK REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### UK REACH Candidate List (SVHC)

Contains no substance(s) listed on the UK REACH Candidate List

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Indication of changes (UK):

None.

### Abbreviations and acronyms:

	°C – Degrees Celsius °F – Degrees Fahrenheit ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road. ASTM: American Society for Testing and Materials
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### Abbreviations and acronyms:

ACGIH – American Conference of Governmental Industrial Hygienists  
 ATE – Acute Toxicity Estimate  
 BCF – Bioconcentration Factor  
 BEI – Biological Exposure Index  
 CAS – Chemical Abstracts Service  
 CLP – Regulation (EC) No 1272/2008 on the Classification, Labeling and Packaging of substances and mixtures.  
 CMR – Carcinogen, Mutagen, Reproductive toxin  
 cP – centipoise (unit of dynamic viscosity)  
 cSt – centistokes (unit of kinematic viscosity)  
 DNEL – Derived No-effect Level  
 DMEL – Derived Minimal Effect Level  
 EC50 – Half maximal effective concentration  
 ECHA – European Chemicals Agency  
 EC-No. – European Community number  
 EU – European Union  
 GHS – Globally Harmonized System of Classification and Labelling of Chemicals  
 h – Hours  
 IATA – International Air Transport Association  
 IC50 – Inhibition concentration  
 IDLH – Immediately Dangerous to Life or Health  
 IMDG – International Maritime Dangerous Goods  
 IOELV – Indicative Occupational Exposure Limit Value  
 KIFS – Swedish Chemicals Agency's (KemI's) Code of Statutes  
 kPa – kilopascal  
 Koc – Adsorption Coefficient  
 Kow – Octanol-Water Partition Coefficient  
 LC50 – Median Lethal Concentration  
 LD50 – Median Lethal Dose  
 LOAEL – Lowest Observed Adverse Effect level  
 mg/l – Milligram per liter  
 mg/kg – Milligram per kilogram  
 mg/m<sup>3</sup> – Milligram per cubic meter  
 Min – Minutes  
 NIOSH – National Institute for Occupational Safety and Health  
 NOEC – No Observed Effect Concentration  
 NO(A)EL – No Observed (Adverse) Effect Level  
 N.O.S. – Not Otherwise Specified  
 OEL – Occupational Exposure Limit  
 PBT - Persistent, Bioaccumulative and Toxic  
 PCN – Poison Centre Notification  
 PNEC – Predicted No Effect Concentration  
 ppm – Parts per million  
 PVC – Polyvinyl chloride  
 REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
 RID – European Agreement concerning the International Carriage of Dangerous Goods by Rail  
 SDS – Safety Data Sheet  
 STEL – Short Term Exposure Limit  
 STOT – Specific Target Organ Toxicity  
 SVHC – Substance of Very High Concern (CMR, vPvB, PBT)  
 TDI – Tolerable Daily Intake  
 TLV – Threshold Limit Value  
 TWA – Time Weighted Average  
 UFI – Unique Formulation Identifier  
 UN – United Nations  
 vPvB - Very Persistent and Very Bioaccumulative  
 WEL – Workplace Exposure Limit  
 WGK – Wassergefährdungsklasse – German water quality classification

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## Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Data sources	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information	: None.
Prepared by	: Nexreg Compliance Inc. <a href="http://www.Nexreg.com">www.Nexreg.com</a>



### Full text of H- and EUH-statements:

Aerosol 3	Aerosol, Category 3
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
Press. Gas (Liq.)	Gases under pressure : Liquefied gas

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aerosol 3	H229	Expert judgement
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Safety Data Sheet (SDS), UK - NEXREG 2024

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