

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Freon™ 410A (R-410A) Refrigerant

|         |                |               |                                 |
|---------|----------------|---------------|---------------------------------|
| Version | Revision Date: | SDS Number:   | Date of last issue: 2025/05/27  |
| 17.0    | 2025/10/15     | 1336423-00056 | Date of first issue: 2017/02/27 |

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Freon™ 410A (R-410A) Refrigerant

SDS-Identcode : 130000050990

#### Manufacturer or supplier's details

Company : The Chemours Chemical (Shanghai) Co., Ltd.

Address : 9F, SCG Parkside, 868 Yinghua Road, Pudong New District  
201204, Shanghai, China

Telephone : 86 400 8056 528

Emergency telephone number : 86 532 8388 9090

E-mail address : SDS.ChinaPSR@chemours.com

Telefax : 86 21 2612 0862

#### Recommended use of the chemical and restrictions on use

Recommended use : Refrigerant

Restrictions on use : For professional users only.

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

|            |                      |
|------------|----------------------|
| Appearance | : Liquefied gas      |
| Colour     | : colourless         |
| Odour      | : slight, ether-like |

Contains gas under pressure; may explode if heated.

#### GHS Classification

Gases under pressure : Liquefied gas

#### GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H280 Contains gas under pressure; may explode if heated.

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Precautionary statements : **Storage:**  
P410 + P403 Protect from sunlight. Store in a well-ventilated place.

### Physical and chemical hazards

Contains gas under pressure; may explode if heated.

### Health hazards

Not classified based on available information.

### Environmental hazards

Not classified based on available information.

### Other hazards which do not result in classification

Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing.

Misuse or intentional inhalation abuse may cause death without warning symptoms, due to cardiac effects.

Rapid evaporation of the product may cause frostbite.

May displace oxygen and cause rapid suffocation.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

| Chemical name      | CAS-No.  | Concentration (% w/w) |
|--------------------|----------|-----------------------|
| Pentafluoroethane# | 354-33-6 | 50                    |
| Difluoromethane#   | 75-10-5  | 50                    |

# Voluntarily-disclosed substance

## 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air.  
If not breathing, give artificial respiration.  
If breathing is difficult, give oxygen.  
Get medical attention immediately.

In case of skin contact : Thaw frosted parts with lukewarm water. Do not rub affected area.  
Get medical attention immediately.

In case of eye contact : Get medical attention immediately.

If swallowed : Ingestion is not considered a potential route of exposure.

Most important symptoms : May cause cardiac arrhythmia.

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and effects, both acute and delayed

Other symptoms potentially related to misuse or inhalation abuse are  
Cardiac sensitisation  
Anaesthetic effects  
Light-headedness  
Dizziness  
confusion  
Lack of coordination  
Drowsiness  
Unconsciousness  
Gas reduces oxygen available for breathing.  
Contact with liquid or refrigerated gas can cause cold burns and frostbite.

Protection of first-aiders : No special precautions are necessary for first aid responders.

Notes to physician : Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, that may be used in situations of emergency life support should be used with special caution.

### 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Not applicable  
Will not burn

Unsuitable extinguishing media : Not applicable  
Will not burn

Specific hazards during fire-fighting : Exposure to combustion products may be a hazard to health.  
If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.

Hazardous combustion products : Fluorine compounds  
Carbon oxides  
Hydrogen fluoride  
carbonyl fluoride

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Fight fire remotely due to the risk of explosion.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.  
Use personal protective equipment.

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### 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
Avoid skin contact with leaking liquid (danger of frostbite).  
Ventilate the area.  
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
- Environmental precautions : Avoid release to the environment.  
Prevent further leakage or spillage if safe to do so.  
Retain and dispose of contaminated wash water.
- Methods and materials for containment and cleaning up : Ventilate the area.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

### 7. HANDLING AND STORAGE

#### Handling

- Technical measures : Use equipment rated for cylinder pressure. Use a backflow preventative device in piping. Close valve after each use and when empty.
- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Avoid breathing gas.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Wear cold insulating gloves/ face shield/ eye protection.  
Valve protection caps and valve outlet threaded plugs must remain in place unless container is secured with valve outlet piped to use point.  
Prevent backflow into the gas tank.  
Use a check valve or trap in the discharge line to prevent hazardous back flow into the cylinder.  
Use a pressure reducing regulator when connecting cylinder to lower pressure (<3000 psig) piping or systems.  
Close valve after each use and when empty. Do NOT change or force fit connections.  
Prevent the intrusion of water into the gas tank.  
Never attempt to lift cylinder by its cap.  
Do not drag, slide or roll cylinders.  
Use a suitable hand truck for cylinder movement.  
Keep away from heat and sources of ignition.  
Take precautionary measures against static discharges.

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Take care to prevent spills, waste and minimize release to the environment.

Avoidance of contact : Oxidizing agents

### Storage

Conditions for safe storage : Cylinders should be stored upright and firmly secured to prevent falling or being knocked over.  
Separate full containers from empty containers.  
Do not store near combustible materials.  
Avoid area where salt or other corrosive materials are present.  
Keep in properly labelled containers.  
Keep in a cool, well-ventilated place.  
Store in accordance with the particular national regulations.

Keep away from direct sunlight.

Materials to avoid : Do not store with the following product types:  
Explosives

Recommended storage temperature : < 52 °C

Storage period : > 10 yr

Further information on storage stability : The product has an indefinite shelf life when stored properly.

Packaging material : Unsuitable material: None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Ensure adequate ventilation, especially in confined areas.  
Minimize workplace exposure concentrations.

### Personal protective equipment

Respiratory protection : Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown.

Eye/face protection : Wear the following personal protective equipment:  
Chemical resistant goggles must be worn.  
Face-shield

Skin and body protection : Skin should be washed after contact.

Hand protection

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Material : Low temperature resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. Breakthrough time is not determined for the product. Change gloves often!

Protective measures : Wear cold insulating gloves/ face shield/ eye protection.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.  
When using do not eat, drink or smoke.  
Wash contaminated clothing before re-use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquefied gas

Colour : colourless

Odour : slight, ether-like

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling range : -51.6 °C (1,013 hPa)

Flash point : Not applicable

Evaporation rate : > 1  
(CCL4=1.0)

Flammability (solid, gas) : Will not burn

Upper explosion limit / Upper flammability limit : Upper flammability limit  
Method: ASTM E681  
None.



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|                                                  |   |                                                          |
|--------------------------------------------------|---|----------------------------------------------------------|
| Lower explosion limit / Lower flammability limit | : | Lower flammability limit<br>Method: ASTM E681<br>None.   |
| Vapour pressure                                  | : | 16,530 hPa (25 °C)<br>30,520 hPa (50 °C)                 |
| Relative vapour density                          | : | 2.5                                                      |
| Relative density                                 | : | 1.06 (25 °C)                                             |
| Density                                          | : | 1.062 g/cm <sup>3</sup> (25 °C)<br>(as liquid)           |
| Solubility(ies)<br>Water solubility              | : | No data available                                        |
| Partition coefficient: n-octanol/water           | : | Not applicable                                           |
| Auto-ignition temperature                        | : | No data available                                        |
| Decomposition temperature                        | : | No data available                                        |
| Viscosity<br>Viscosity, kinematic                | : | Not applicable                                           |
| Explosive properties                             | : | Not explosive                                            |
| Oxidizing properties                             | : | The substance or mixture is not classified as oxidizing. |
| Particle characteristics<br>Particle size        | : | Not applicable                                           |

### 10. STABILITY AND REACTIVITY

|                                    |   |                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | : | Not classified as a reactivity hazard.                                                                                                                                                                                                                                                                                                                             |
| Chemical stability                 | : | Stable if used as directed. Follow precautionary advice and avoid incompatible materials and conditions.                                                                                                                                                                                                                                                           |
| Possibility of hazardous reactions | : | Can react with strong oxidizing agents.                                                                                                                                                                                                                                                                                                                            |
| Conditions to avoid                | : | This substance is not flammable in air at temperatures up to 100 °C (212 °F) at atmospheric pressure. However, mixtures of this substance with high concentrations of air at elevated pressure and/or temperature can become combustible in the presence of an ignition source. This substance can also become combustible in an oxygen enriched environment (oxy- |

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gen concentrations greater than that in air). Whether a mixture containing this substance and air, or this substance in an oxygen enriched atmosphere become combustible depends on the inter-relationship of 1) the temperature 2) the pressure, and 3) the proportion of oxygen in the mixture. In general, this substance should not be allowed to exist with air above atmospheric pressure or at high temperatures; or in an oxygen enriched environment. For example this substance should NOT be mixed with air under pressure for leak testing or other purposes.  
Heat, flames and sparks.

|                                  |   |                                                |
|----------------------------------|---|------------------------------------------------|
| Incompatible materials           | : | Oxidizing agents                               |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

### 11. TOXICOLOGICAL INFORMATION

|                 |   |                                           |
|-----------------|---|-------------------------------------------|
| Exposure routes | : | Inhalation<br>Skin contact<br>Eye contact |
|-----------------|---|-------------------------------------------|

#### Acute toxicity

Not classified based on available information.

#### Components:

##### Pentafluoroethane:

|                           |   |                                                                                                                                                                                                                                                                                                                  |
|---------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute inhalation toxicity | : | LC50 (Rat): > 800000 ppm<br>Exposure time: 4 h<br>Test atmosphere: gas<br>Method: OECD Test Guideline 403<br><br>No observed adverse effect concentration (Dog): 75000 ppm<br>Remarks: Cardiac sensitisation<br><br>Cardiac sensitisation threshold limit (Dog): 368.159 mg/m3<br>Remarks: Cardiac sensitisation |
|---------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

##### Difluoromethane:

|                           |   |                                                                                                                                                                                                                                       |
|---------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute oral toxicity       | : | Assessment: The substance or mixture has no acute oral toxicity                                                                                                                                                                       |
| Acute inhalation toxicity | : | LC50 (Rat): > 520000 ppm<br>Exposure time: 4 h<br>Test atmosphere: gas<br>Method: OECD Test Guideline 403<br><br>No observed adverse effect concentration (Dog): 350000 ppm<br>Test atmosphere: gas<br>Remarks: Cardiac sensitisation |



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Lowest observed adverse effect concentration (Dog): > 350000 ppm

Test atmosphere: gas

Remarks: Cardiac sensitisation

Cardiac sensitisation threshold limit (Dog): > 735,000 mg/m3

Test atmosphere: gas

Remarks: Cardiac sensitisation

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal toxicity

### Skin corrosion/irritation

Not classified based on available information.

### Components:

#### Difluoromethane:

Result : No skin irritation

### Serious eye damage/eye irritation

Not classified based on available information.

### Components:

#### Difluoromethane:

Result : No eye irritation

### Respiratory or skin sensitisation

#### Skin sensitisation

Not classified based on available information.

#### Respiratory sensitisation

Not classified based on available information.

### Components:

#### Difluoromethane:

Exposure routes : Skin contact  
Result : negative

### Germ cell mutagenicity

Not classified based on available information.

### Components:

#### Pentafluoroethane:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

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|                      |   |                                                                                                                                                                                                |
|----------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Genotoxicity in vivo | : | Test Type: In vitro mammalian cell gene mutation test<br>Result: negative<br>Remarks: Based on data from similar materials                                                                     |
|                      | : | Test Type: Chromosome aberration test in vitro<br>Method: OECD Test Guideline 473<br>Result: negative                                                                                          |
|                      | : | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)<br>Species: Mouse<br>Application Route: inhalation (gas)<br>Method: OECD Test Guideline 474<br>Result: negative |

### Difluoromethane:

|                                     |   |                                                                                                                                                                                                |
|-------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Genotoxicity in vitro               | : | Test Type: Bacterial reverse mutation assay (AMES)<br>Method: OECD Test Guideline 471<br>Result: negative                                                                                      |
|                                     | : | Test Type: Chromosome aberration test in vitro<br>Method: OECD Test Guideline 473<br>Result: negative                                                                                          |
| Genotoxicity in vivo                | : | Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)<br>Species: Mouse<br>Application Route: inhalation (gas)<br>Method: OECD Test Guideline 474<br>Result: negative |
| Germ cell mutagenicity - Assessment | : | Weight of evidence does not support classification as a germ cell mutagen.                                                                                                                     |

### Carcinogenicity

Not classified based on available information.

### Reproductive toxicity

Not classified based on available information.

### Components:

#### Pentafluoroethane:

|                               |   |                                                                                                                                                                                      |
|-------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effects on fertility          | : | Test Type: One-generation reproduction toxicity study<br>Species: Rat<br>Application Route: inhalation (vapour)<br>Result: negative<br>Remarks: Based on data from similar materials |
| Effects on foetal development | : | Test Type: Embryo-foetal development<br>Species: Rat<br>Application Route: inhalation (gas)                                                                                          |

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Method: OECD Test Guideline 414  
Result: negative

### Difluoromethane:

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Effects on fertility               | : Species: Mouse<br>Application Route: Inhalation<br>Result: negative<br>Remarks: Based on data from similar materials                                                                                                                                                                                                                                                                                                                                            |
| Effects on foetal development      | : Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test<br>Species: Rat<br>Application Route: inhalation (gas)<br>Method: OECD Test Guideline 414<br>Result: negative<br><br>Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test<br>Species: Rabbit<br>Application Route: inhalation (gas)<br>Method: OECD Test Guideline 414<br>Result: negative |
| Reproductive toxicity - Assessment | : Weight of evidence does not support classification for reproductive toxicity                                                                                                                                                                                                                                                                                                                                                                                    |

### STOT - single exposure

Not classified based on available information.

### Components:

#### Difluoromethane:

|                 |                                                                                                |
|-----------------|------------------------------------------------------------------------------------------------|
| Exposure routes | : inhalation (gas)                                                                             |
| Assessment      | : No significant health effects observed in animals at concentrations of 20000 ppmV/4h or less |

### STOT - repeated exposure

Not classified based on available information.

### Components:

#### Difluoromethane:

|                 |                                                                                                 |
|-----------------|-------------------------------------------------------------------------------------------------|
| Exposure routes | : inhalation (gas)                                                                              |
| Assessment      | : No significant health effects observed in animals at concentrations of 250 ppmV/6h/d or less. |

### Repeated dose toxicity

### Components:

#### Pentafluoroethane:

|         |       |
|---------|-------|
| Species | : Rat |
|---------|-------|

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|                   |                           |
|-------------------|---------------------------|
| NOAEL             | : >= 50000 ppm            |
| Application Route | : inhalation (gas)        |
| Exposure time     | : 13 Weeks                |
| Method            | : OECD Test Guideline 413 |

### Difluoromethane:

|                   |                           |
|-------------------|---------------------------|
| Species           | : Rat, male and female    |
| NOAEL             | : 49100 ppm               |
| LOAEL             | : > 49100 ppm             |
| Application Route | : inhalation (gas)        |
| Exposure time     | : 13 Weeks                |
| Method            | : OECD Test Guideline 413 |

### Aspiration toxicity

Not classified based on available information.

### Components:

#### Difluoromethane:

|| No aspiration toxicity classification

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

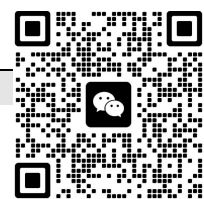
### Components:

#### Pentafluoroethane:

|                                                     |                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Toxicity to fish                                    | : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l<br>Exposure time: 96 h<br>Remarks: Based on data from similar materials                                                                                                                                                                                                                                |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 (Daphnia magna (Water flea)): > 100 mg/l<br>Exposure time: 48 h<br>Remarks: Based on data from similar materials                                                                                                                                                                                                                                         |
| Toxicity to algae/aquatic plants                    | : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br>Remarks: Based on data from similar materials<br><br>NOEC (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br>Remarks: Based on data from similar materials |

#### Difluoromethane:

|| Toxicity to fish : LC50 (Fish): 1,507 mg/l



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|                                                     |                                                                                                                                |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                                                     | Exposure time: 96 h<br>Method: ECOSAR (Ecological Structure Activity Relationships)                                            |
| Toxicity to daphnia and other aquatic invertebrates | : EC50 (Daphnia (water flea)): 652 mg/l<br>Exposure time: 48 h<br>Method: ECOSAR (Ecological Structure Activity Relationships) |
| Toxicity to algae/aquatic plants                    | : EC50 (green algae): 142 mg/l<br>Exposure time: 96 h<br>Method: ECOSAR (Ecological Structure Activity Relationships)          |

### Persistence and degradability

#### Components:

##### Pentafluoroethane:

|                  |                                                                                                                        |
|------------------|------------------------------------------------------------------------------------------------------------------------|
| Biodegradability | : Result: Not readily biodegradable.<br>Biodegradation: 5 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 301D |
|------------------|------------------------------------------------------------------------------------------------------------------------|

##### Difluoromethane:

|                  |                                                                          |
|------------------|--------------------------------------------------------------------------|
| Biodegradability | : Result: Not readily biodegradable.<br>Method: OECD Test Guideline 301D |
|------------------|--------------------------------------------------------------------------|

### Bioaccumulative potential

#### Components:

##### Pentafluoroethane:

|                                        |                                                |
|----------------------------------------|------------------------------------------------|
| Partition coefficient: n-octanol/water | : Pow: 1.48<br>Method: OECD Test Guideline 107 |
|----------------------------------------|------------------------------------------------|

##### Difluoromethane:

|                                        |                  |
|----------------------------------------|------------------|
| Partition coefficient: n-octanol/water | : log Pow: 0.714 |
|----------------------------------------|------------------|

### Mobility in soil

No data available

### Other adverse effects

#### Components:

##### Pentafluoroethane:

|                           |                                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------------|
| Ozone-Depletion Potential | : Permits required<br>Regulation: Regulations of Ozone Depleting Substances Management (Update: 2021-10-25) |
|---------------------------|-------------------------------------------------------------------------------------------------------------|



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Number: 2903399047

### Difluoromethane:



Ozone-Depletion Potential : Permits required  
Regulation: Regulations of Ozone Depleting Substances  
Management (Update: 2021-10-25)  
Number: 2903399042

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Empty pressure vessels should be returned to the supplier.  
If not otherwise specified: Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### International Regulations

#### UNRTDG

UN number : UN 3163  
Proper shipping name : LIQUEFIED GAS, N.O.S.  
(Pentafluoroethane, Difluoromethane)

Class : 2.2  
Packing group : Not assigned by regulation

Labels : 2.2  
Environmentally hazardous : no

#### IATA-DGR

UN/ID No. : UN 3163  
Proper shipping name : Liquefied gas, n.o.s.  
(Pentafluoroethane, Difluoromethane)

Class : 2.2  
Packing group : Not assigned by regulation

Labels : Non-flammable, non-toxic Gas

Packing instruction (cargo aircraft) : 200  
Packing instruction (passenger aircraft) : 200

#### IMDG-Code

UN number : UN 3163  
Proper shipping name : LIQUEFIED GAS, N.O.S.  
(Pentafluoroethane, Difluoromethane)

Class : 2.2  
Packing group : Not assigned by regulation

Labels : 2.2  
EmS Code : F-C, S-V



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Marine pollutant : no

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### GB 6944/12268

UN number : UN 3163  
Proper shipping name : LIQUEFIED GAS, N.O.S.  
(Pentafluoroethane, Difluoromethane)

Class : 2.2  
Packing group : Not assigned by regulation  
Labels : 2.2  
Marine pollutant : no

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 15. REGULATORY INFORMATION

### National regulatory information

#### Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals : This product is not listed in the catalogue of hazardous chemicals and it does not meet the definition of hazardous chemicals and its principles of determination.

Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218) : Not listed

Hazardous Chemicals for Priority Management under SAWS : Not listed

Catalogue of Specially Controlled Hazardous Chemicals : Not listed

List of Explosive Precursors : Not listed

### Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Not listed

### Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import and Export : Not listed



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### Regulation on the Administration of Precursor Chemicals

Catalogue and Classification of Precursor Chemicals : Not listed

### Yangtze River Protection Law

This product does not contain any dangerous chemicals prohibited for inland river transport.

### Regulations of Ozone Depleting Substances Management

List of Controlled Ozone Depleting Substances Import and Export : Listed

List of Controlled Ozone Depleting Substances : Listed

### Environmental Protection Law

List of Priority Controlled Chemicals : Not listed

List of Key Controlled New Pollutants : Not listed

List of Toxic and Hazardous Water Pollutants : Not listed

List of Toxic and Hazardous Air Pollutants : Not listed

List of Toxic and Hazardous Soil Pollutants : Not listed

### Measures for the Administration of Non-Medical Use of Narcotic Drugs and Psychotropic Substances

Catalogue of Controlled Narcotic Drugs and Psychotropic Substances with Non-Medical Use : Not listed

### Measures for the Administration on Import and Export Licenses for Dual-Use Items and Technologies

Catalogue for Dual-Use Items and Technologies : Not listed

Montreal Protocol : Pentafluoroethane  
Difluoromethane

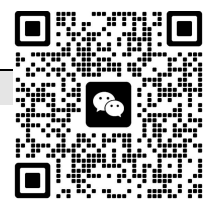
## 16. OTHER INFORMATION

Revision Date : 2025/10/15

Other information : Freon™ and any associated logos are trademarks or copyrights of The Chemours Company FC, LLC.  
Chemours™ and the Chemours Logo are trademarks of The Chemours Company.  
Before use read Chemours safety information.  
For further information contact the local Chemours office or nominated distributors.

### Further information

Sources of key data used to : Internal technical data, data from raw material SDSs, OECD





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compile the Safety Data Sheet

eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : yyyy/mm/dd

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MERCOSUR - The Agreement for the Facilitation of the Transport of Dangerous Goods; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their

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intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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