

Safety Data Sheet

HFC-227ea

1 Identification of the substance/preparation and of the company

Material Name: HFC-227ea

MANUFACTURER: ICOOL USA Incorporated
1638 Thompson Rd, Hartselle, AL 35640
Email: hvac@icoolglobal.com

FOR MORE INFORMATION CALL:

(Monday-Friday, 8:00am-5:00pm)

Tel: 256-754-5507

2 Composition/information on ingredients

Chemical Name: 1,1,1,2,3,3,3-heptafluoropropane

Concentration: >99.9%

CAS Number: 431-89-0

EC Number: 207-079-2

R Phrases: None

Symbols: None

3 Hazard identification

Appearance: Gas, colourless

To best of our knowledge, the properties of this material have not been fully evaluated

Contact with liquid or cold gas may cause frost-bite

Has central nervous system effects

In cases of severe exposure, narcosis may develop

4 First aid measures

Contact with skin

- Take off immediately all contaminated clothing
- Wash affected area with plenty of soap and water
- Seek medical advice
- Contaminated clothing should be laundered before reuse
- Possible frost-bite of affected areas

Contact with eyes

- If substance got into eyes, immediately wash out with plenty of water for at least 15 minutes
- Seek medical advice

Ingestion

- Not applicable

Inhalation

- Remove patient to fresh air
- Seek medical advice

General

- Note to Physicians: Treat by observation and supportive measures as indicated by the patient's condition
- The use of epinephrine (adrenaline) is contraindicated in the treatment of over-exposure to this product

5 Fire-fighting measures

Not flammable

Decomposition products may include fluorine compounds and oxides of carbon

Use extinguishing media appropriate to surrounding conditions

Substance evolves toxic fumes, wear self-contained breathing apparatus
In the event of an adjacent fire, cool containers with water spray
Portable containers should be moved if possible and without risk
This material is stored in a pressurized container

6 Accidental release measures

Immediate actions

- Evacuate the area

Clean-up actions

- Allow product to evaporate

Special precautions

- Do not allow to enter public sewers and waterways

7 Handling and storage

Handling

- Keep container tightly closed
- Use only in well ventilated place

Storage

- Keep in cool, dry, well ventilated place

8 Exposure controls/personal protection

Engineering controls

- Engineering controls should be provided to prevent the needs for ventilation

Personal protection

- Proper chemicals handling procedures should be adopted
- Use good personal hygiene practices
- Wear suitable protective clothing and eye/face protection
- Wear lined neoprene gloves
- Wear self-contained breathing apparatus if concentration exceeds 10%

Exposure limits

- There are no recommended or established controls for this product

9 Physical and chemical properties

Appearance: Gas, colourless

Boiling point: -16°C

Vapour pressure: 58.8 psia at 21°C

Vapour density: (air=1) 6.04

Melting point: -131°C

Water solubility: 0.26g/l at 20°C

Specific gravity: (water=1) (liquid) 1.46

Not flammable

Log Pow 2.5 (calculated value)

10 Stability and reactivity

Avoid contact with alkalis (strong bases), avoid contact with oxidising substances, avoid contact with reducing agents, avoid contact with powdered metals

11 Toxicological information

Toxicological information

- LC50 (inhalation, rat) >7200mg/l/4h
- Contact with liquid or cold gas may cause frost-bite

Mutagenicity

- Mutagenicity (Ames Test): Negative

12 Ecological information

Ecotoxicology

- No experimental data available

13 Disposal considerations

Disposal should be in accordance with local, state or national legislation

14 Transport information

Proper shipping name: Heptafluoropropane (Fire Extinguishing Gas)

Emergency action code:

- EAC: 2RE
- UN: 3296
- Hazard Class: 2.2
- Packing Group: Not applicable

Road/Rail (ADR/RID)

- ADR UN No.: 3296
- ADR Hazard Class: 2.2
- ADR Item No.: 2GradeA
- ADR/RID No.: 20
- Tremcard: 20G39

Sea (IMDG)

- IMDG UN No.: 3296
- IMDG Hazard Class: 2.2
- IMDG Page No.: 2144-1
- IMDG Pack Group: Not applicable
- IMDG EmS: 2-09
- IMDG MFAG: 350

Air (ICAO/IATA)

- ICAO UN No.: 3296
- ICAO Hazard Class: 2.2
- ICAO Packing Group: Not applicable

15 Regulatory information

Classification and labelling

- EINECS No.: 207-079-2
- The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regards to the product's properties

Applicable Laws

- This Safety Data Sheet is provided in compliance with the EC Directive 93/112/EC

Risk Phrases

- None

Safety Phrases

- When using do not smoke (S21)

- In case of fire and/or explosion do not breathe fumes (S41)

16 Other information

CURRENT ISSUE DATE: August, 2022
PREVIOUS ISSUE DATE: January, 2022