

Safety Data Sheet

R-32

www.newradargas.com

Section 1: Product and Company Identification

Wuhan Newradar Special Gas Co.,Ltd

Room 1401, building 3, wanda global international center, songzhu road, hongshan district, wuhan

Product Code: R-32 Part Number: R-32

Section 2: Hazards Identification



Hazard Classification: Gases Under Pressure

Hazard Statements:

Contains gas under pressure; may explode if heated

Precautionary Statements

Storage:

Protect from sunlight.
Store in well-ventilated place.

Section 3: Composition/Information on Ingredients

CAS # 75-10-5

| Chemical Substance | Chemical Family | Trade Names |
|--------------------|-----------------|---|
| METHYLENE FLUORIDE | refrigerants | chlorodifluoromethane, difluorethane, chlorotetrafluoroethane |

Section 4: First Aid Measures

| Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|-----------------------------|---|-----------|-------------------|-----------------------|
| Flush skin with warm water. | Flush eyes with large amounts of warm water for at least 15 minutes | Unlikely | Move to fresh air | Not available |

Section 5: Fire Fighting Measures

| Suitable Extinguishing Media | Products of Combustion | Protection of Firefighters |
|----------------------------------|------------------------|---------------------------------|
| Use carbon dioxide, or dry foam. | Not available | Not available |
| | | Not available |
| | | Not available |
| | | Not available |

Section 6: Accidental Release Measures

| Personal Precautions | Environmental Precautions | Methods for Containment |
|---|---------------------------|--|
| Always wear recommended personal protective equipment | Not available | Stop leak if without risk and provide ventilation. |

| Methods for Cleanup | Other Information |
|---------------------|-------------------|
| Not available | Not available |

Section 7: Handling and Storage

| Handling | Storage |
|--|--|
| Store in cool, well ventilated area of low fire risk and out of direct | Avoid breathing vapors and liquid contact with eyes, skin or |
| sunlight | clothing. |

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines
AIHA WEEL (United States, 10/2011). TWA: 1000 ppm 8 hours

Engineering Controls

No specific controls are needed.

| Eye Protection | Skin Protection | Respiratory Protection |
|---|--|------------------------|
| Wear safety glasses for normal conditions | General work clothing and leather gloves would be sufficient | Not available |

General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

Section 9: Physical and Chemical Properties

| I | Physical State | Appearance | Color | Change in Appearance | Physical Form | Odor | Taste |
|---|----------------|------------|-----------|----------------------|---------------|----------|---------------|
| | Gas | Colorless | Colorless | Not available | Gas | Odorless | Not available |

| Flash Point | Flammability | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits | Lower Explosive Limits |
|---------------|---------------|--|-----------------------------|---------------------------|---------------------------|
| Not available | Not available | 6854.88 (log = 3.84) (estimated from water solubility) | 530°C (986°F) | 33% | 13% |

| Boiling Point | Freezing Point | Vapor Pressure | Vapor Density | Specific Gravity | Water Solubility | рН | Odor Threshold | Evaporation Rate | Viscosity |
|--------------------------|-----------------------|-------------------------|------------------|---------------------|---------------------|------------------|-------------------|---------------------|------------------|
| -51.6°C (- 60.9°F) | -136°C (- 212.8°F) | 12825 mmHg @ 25 C | 1.8 (Air=1) | Not available | >1.68 g/l | Not available | Not available | Not applicable | Not available |

| Molecular Weight | Molecular Formula | Density | Weight per Gallon | Volatility by Volume | Volatility | Solvent Solubility |
|------------------|-------------------|---------------|-------------------|----------------------|---------------|--------------------|
| 52.03 | C-H2-F2 | Not available | Not available | Not available | Not available | Not available |

Section 10: Stability and Reactivity

| Stability | Conditions to Avoid | Incompatible Materials |
|---------------------|---------------------|--|
| Stable under normal | Stable under normal | Freshly abraded aluminum surfaces. Chemically active metals: potassium, calcium, |
| conditions | conditions | powdered aluminum, magnesium and zinc |

| Hazardous Decomposition Products | Possibility of Hazardous Reactions |
|---|------------------------------------|
| Halogens halogen acids, and possibly carbonyl halides | Will not polymerize |

Section 11: Toxicology Information

Acute Effects

| Oral LD50 | Dermal LD50 | Inhalation |
|-----------------------------|----------------|--|
| Inhalation Rat 3780 mg/m³ 1 | Not | Symptoms of asphyxiation, loss of coordination, increased pulse rate and deeper respiration will |
| hours | available | occur at higher concentrations. |

| Eye Irritation | Skin Irritation | Sensitization |
|----------------|-----------------|--|
| Frostbite | Frostbite | Overexposure may cause dizziness and loss of concentration |

Chronic Effects

| l | Carcinogenicity | Mutagenicity | Reproductive Effects | Developmental Effects |
|---|-----------------|---------------|----------------------|-----------------------|
| | Not available | Not available | Not available | No data |

Section 12: Ecological Information

Fate and Transport

| Eco toxicity | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|--------------------------------------|-----------------------------|--|-------------------------|
| Fish toxicity: not available | Not available | 5.38 (estimated from water solubility) | Not available |
| Invertibrate toxicity: not available | | | |
| Algal toxicity: not available | | | |
| Phyto toxicity: not available | | | |
| Other toxicity: not available | | | |

Section 13: Disposal Considerations

Disposal must comply with federal, state, and local disposal or discharge laws.

Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

| Proper Shipping Name | ID Number | Hazard Class or Division | Packing Group | Labeling Requirements | Passenger Aircraft or Railcar Quantity Limitations | Cargo Aircraft Only Quantity Limitations | Additional Shipping Description |
|--------------------------------------|--------------|--------------------------------|------------------|--------------------------|--|--|---------------------------------------|
| Difluoromethane (methylene fluoride) | UN3252 | 2.1 | Not applicable | Not available | Forbidden | 15 | Not available |

Canadian Transportation of Dangerous Goods

| Shipping Name | UN Number | Class | Packing Group / Risk Group |
|--------------------------------------|-----------|-------|----------------------------|
| Difluoromethane (methylene fluoride) | UN3252 | 2.1 | Not applicable |

Section 15: Regulatory Information

U.S. Regulations

| CERCLA Sections | SARA 355.30 | SARA 355.40 | |
|-----------------|----------------|----------------|--|
| Not regulated. | Not regulated. | Not regulated. | |

SARA 370.21

| Acute | Acute Chronic | | Reactive | Sudden Release |
|-------|-----------------|-----|----------|----------------|
| No | No | Yes | No | Yes |

SARA 372.65

Not regulated.

OSHA Process Safety

Not regulated.

State Regulations

CA Proposition 65
Not regulated.

Canadian Regulations

WHMIS Classification
Not determined.

National Inventory Status

| US Inventory (TSCA) | TSCA 12b Export Notification | Canada Inventory (DSL/NDSL) |
|----------------------|------------------------------|-----------------------------|
| Listed on inventory. | Not listed. | Not determined. |

Section 16: Other Information

NFPA Rating

HEALTH=1 FIRE=4 REACTIVITY=0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard