

# **Safety Data Sheet**

### Tetrafluoromethane

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: Tetrafluoromethane

#### **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 #

Chemical Substance	Chemical Family	Trade Names
TETRAFLUOROMETHANE	halogenated, aliphatic	CARBON TETRAFLUORIDE; CARBON FLUORIDE (CF4); CARBON FLUORIDE; FC 14; PERFLUOROMETHANE; R 14; R 14 (REFRIGERANT); METHANE, TETRAFLUORO-; FREON 14; TETRAFLUOROCARBON; UN 1982; CF4

### **Section 4: First Aid Measures**

Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115 F; 41-46 C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.	Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.	If a large amount is swallowed, get medical attention.	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.	For inhalation, consider oxygen.

## **Section 5: Fire Fighting Measures**

Suitable Extinguishing Media	Products of Combustion	Protection of Firefighters
Non-flammable. Use suitable extinguishing media for surrounding fire.	Carbon monoxide, carbon dioxide, hydrogen fluoride gas.	<ul> <li>Any self-contained breathing apparatus with a full facepiece.</li> <li>Any self-contained breathing apparatus with a full facepiece.</li> </ul>

### **Section 6: Accidental Release Measures**

Personal Precautions	Environmental Precautions	Methods for Containment
Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.	None known	Stop leak if possible without personal risk.

Methods for Cleanup	Other Information
Evacuate area. Contact emergency personnel.	None

## Section 7: Handling and Storage

Handling	Storage
Store and handle in accordance with all current regulations and standards. Subject to storage regulations:	Protect cylinders from
U.S. OSHA 29 CFR 1910.101.	damage.

## **Section 8: Exposure Controls/Personal Protection**

Exposure Guidelines
TETRAFLUOROMETHANE: No occupational exposure limits established.

#### **Engineering Controls**

Handle only in fully enclosed systems.

Eye Protection	Skin Protection	Respiratory Protection
For the gas: Eye protection not required, but recommended. For the	For the gas: Protective clothing is not	Any self-contained
liquid: Wear splash resistant safety goggles. Contact lenses should not	required. For the liquid: Wear	breathing apparatus with
be worn. Provide an emergency eye wash fountain and quick drench	appropriate protective, cold insulating	a full facepiece.
shower in the immediate work area.	clothing.	

#### **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**

Physical State	Appearance	Color	Change in Appearance	Physical Form	Odor	Taste
Gas	Clear	Colorless	N/A	Gas	Odorless	N/A

Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
Not flammable	Not available	Not available	Nonflammable	Nonflammable	Nonflammable

Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	рН	Odor Threshold	Evaporation Rate	Viscosity
-198 F (-128 C)	-305 F (- 187 C)	799 mmHg @ -127 C	3.05 (Air=1)	1.89 @ - 183 C	0.0015% @ 25 C	Not applicable	Not available	Not applicable	0.170 cP @ -60 C

Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
88.01	C-F4	0.228 lb/ft 3 (3.65 kg/m 3 )	Not available	Not applicable	Not applicable	Soluble: Not available

## **Section 10: Stability and Reactivity**

Stability	Conditions to Avoid	Incompatible Materials
Thermally stable; chemically very inert.	Thermally stable; chemically very inert.	Metals

Hazardous Decomposition Products	Possibility of Hazardous Reactions
Halogenated compounds	Will not polymerize.

### **Section 11: Toxicology Information**

#### **Acute Effects**

Oral LD50	Dermal LD50	Inhalation	ı
Not available	Not available	Nausea, vomiting, symptoms of drunkenness, disorientation, suffocation	ı

Eye Irritation	Skin Irritation	Sensitization	
Frostbite	Irritation	Difficulty breathing	

#### **Chronic Effects**

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	Not available	Not available
Invertibrate toxicity: Not available			
Algal toxicity: Not available			
Phyto toxicity: Not available			
Other toxicity: Not available			

### **Section 13: Disposal Considerations**

Dispose in accordance with all applicable regulations.

## 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
Tetrafluoromethane	UN1982	2.2	Not applicable	2.2	75 kg or L	150 kg	N/A

**Canadian Transportation of Dangerous Goods** 

Shipping Name	UN Number	Class	Packing Group / Risk Group
Tetrafluoromethane, compressed	UN1982	2.2	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	Chronic	Fire	Reactive	Sudden Release
Yes	No	No	No	Yes

**SARA 372.65** 

Not regulated.

**OSHA Process Safety** 

Not regulated.

**State Regulations** 

CA Proposition 65
Not regulated.

**Canadian Regulations** 

WHMIS Classification

**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=0 REACTIVITY=0

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