



**YTTRIUM FLUORIDE  
CAS NO 13709-49-4**

**MATERIAL SAFETY DATA SHEET  
SDS/MSDS**

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

**1.1 Product identifiers**

Product name : Yttrium Fluoride

CAS-No. : 13709-49-4

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

**1.3 Details of the supplier of the safety data sheet**

Company : Central Drug House (P) Ltd  
7/28 Vardaan House  
New Delhi -110002  
INDIA

Telephone : +91 11 49404040

Email : [care@cdhfinechemical.com](mailto:care@cdhfinechemical.com)

**1.4 Emergency telephone number**

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

**2.2 Label elements**

**Labelling according Regulation (EC) No 1272/2008**

Pictogram none

Signal word none

Hazard statement(s) none

Precautionary statement(s) none

Supplemental Hazard Statements none

Safety data sheet available on request.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Formula : YF<sub>3</sub>  
Molecular weight : 145.9 g/mol  
CAS-No. : 13709-49-4

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
<b>Yttrium(III) fluoride</b>			
CAS-No.	13709-49-4	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H302, H332, H312, H315, H319, H335	<= 100 %
EC-No.	237-257-5		

For the full text of the H-Statements mentioned in this Section, see Section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

##### In case of skin contact

Wash off with soap and plenty of water.

##### In case of eye contact

Flush eyes with water as a precaution.

##### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Hydrogen fluoride, Yttrium oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

### SECTION 6: Accidental release measures

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

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

#### 6.2 Environmental precautions

No special environmental precautions required.

#### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.  
For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
Storage class (TRGS 510): Non Combustible Solids

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

#### 8.2 Exposure controls

##### Appropriate engineering controls

General industrial hygiene practice.

##### Personal protective equipment

###### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

###### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

###### Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

###### Respiratory protection

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

###### Control of environmental exposure

No special environmental precautions required.

### SECTION 9: Physical and chemical properties

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

- |  |                                   |
|--|-----------------------------------|
| a) Appearance                              | Form: solid<br>Colour: light grey |
| b) Odour                                   | odourless                         |
| c) Odour Threshold                         | No data available                 |
| d) pH                                      | No data available                 |
| e) Melting point/freezing point            | 1,387 °C                          |
| f) Initial boiling point and boiling range | No data available                 |
| g) Flash point                             | Not applicable                    |
| h) Evaporation rate                        | No data available                 |

- |    |  |                         |
|----|--|-------------------------|
| i) | Flammability (solid, gas)                    | No data available       |
| j) | Upper/lower flammability or explosive limits | No data available       |
| k) | Vapour pressure                              | No data available       |
| l) | Vapour density                               | No data available       |
| m) | Relative density                             | 4.010 g/cm <sup>3</sup> |
| n) | Water solubility                             | insoluble               |
| o) | Partition coefficient: n-octanol/water       | No data available       |
| p) | Auto-ignition temperature                    | No data available       |
| q) | Decomposition temperature                    | No data available       |
| r) | Viscosity                                    | No data available       |
| s) | Explosive properties                         | No data available       |
| t) | Oxidizing properties                         | No data available       |

## 9.2 Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

Avoid moisture.

### 10.5 Incompatible materials

Strong acids

### 10.6 Hazardous decomposition products

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Hydrogen fluoride, Yttrium oxides

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available Yttrium(III) fluoride

#### Skin corrosion/irritation

No data available (Yttrium(III) fluoride)

#### Serious eye damage/eye irritation

No data available (Yttrium(III) fluoride)

#### Respiratory or skin sensitisation

No data available (Yttrium(III) fluoride)

#### Germ cell mutagenicity

No data available (Yttrium(III) fluoride)

## **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## **Reproductive toxicity**

No data available(Yttrium(III) fluoride)

## **Specific target organ toxicity - single exposure**

Inhalation - May cause respiratory irritation.(Yttrium(III) fluoride)

## **Specific target organ toxicity - repeated exposure**

No data available

## **Aspiration hazard**

No data available(Yttrium(III) fluoride)

## **Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Salivation, Nausea, Abdominal pain, Vomiting, Fever, Rapid respiration, Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia.(Yttrium(III) fluoride)

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

No data available

### **12.2 Persistence and degradability**

No data available

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available(Yttrium(III) fluoride)

### **12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **12.6 Other adverse effects**

No data available

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### **Contaminated packaging**

Dispose of as unused product.

## **SECTION 14: Transport information**

### **14.1 UN number**

ADR/RID: -

IMDG: -

IATA: -

### **14.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

### **14.3 Transport hazard class(es)**

ADR/RID: -

IMDG: -

IATA: -

**14.4 Packaging group**

ADR/RID: -

IMDG: -

IATA: -

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6 Special precautions for user**

No data available

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.cdhfinechemical.com](http://www.cdhfinechemical.com) for additional terms and conditions of sale.