# **GHS Safety Data Sheet**

#### SDS No. : YBH01XAEG

Date Issued: 2017/06/21

### Section 1. Identification of the substance or mixture and of the supplier

### 1.1 Product Information

Product name:  $YbF_3$ ; Ytterbium fluoride, anhydrous

Product number	Purity	Form	Size (mm) or Shape
YBH05XB	99.9%(3N)	solid	

### 1.2 Company Information:

Manufacturer: Kojundo Chemical Laboratory Co., Ltd.

1-28, 5-chome, Chiyoda, Sakado-shi, Saitama Japan 350-0284

Phone: +81-49-284-1511 Fax: +81-49-284-1351

Emergency Phone: +81-49-284-1511

## Section 2. Hazards identification

#### GHS Classification

Health Hazards	Environmental Hazards	Physical Hazards
Skin corrosion/ irritation: Category 2 Serious eye damage/eye irritation : Category 2 Specific target organ toxicity, single exposure: Category 3	No data available	Flammable solids : Not classified Pyrophoric solids : Not classified Self-heating substances and mixtures : Not classified Substances and mixtures which, in contact with water, emit flammable gases : Not classified

GHS Label: W



Pictograms or symbols:

Warning word: WARNING	
Hazard information	Description of precaution
Causes skin irritation	Wear protective gloves/protective clothing/eye protection /respiratory
Causes serious eye irritation.	protection/face protection during handling. Avoid breathing dust/mist/gas/fume/vapors. Do not eat, drink or smoke
May cause respiratory irritation	<ul> <li>when using this product, and wash hands thoroughly after handling.</li> <li>Take off the contaminated clothing and wash before reuse.</li> <li>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</li> <li>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>IF ON SKIN; Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention.</li> <li>Call a POISON CENTER or doctor/physician if you feel unwell.</li> <li>Protect from sunlight. Store in a cool, dry and well ventilated place. Keep</li> </ul>
	container tightly closed. Store locked up. Dispose of contents/ container in accordance with local/national regulations.

Additional hazard information : With respect to additional hazard information, see Section 11.

# Section 3. Composition / information on ingredients

Chemical or common name:	Ytterbium(III) fluoride
Chemical formula:	$YbF_3$
Single Substance or Mixture:	Single substance
Composition:	100%
CAS#:	13760-80-0
RTECS#:	ZG2487500
TSCA inventory :	listed
EINECS:	2373542

### Section 4. First aid measures

Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to		
	rinse for at least 15 minutes and get medical attention.		
Skin contact:	Promptly flush contaminated skin with soap or mild detergent and water.		
	Contact physician if irritation continues.		
Inhalation:	Remove the exposed person immediately and provide fresh air.		
	Get medical attention.		
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.		

## Section 5. Fire fighting measures

Extinguishing media:	The product is nonflammable. Use media appropriate for surrounding fire.
Fire fighting	Self-contained breathing apparatus and full protective clothing should be used, if this product is involved in fire. In case of fire, the product may liberate irritating gases/ fume.
Fire fighting	if this product is involved in fire.

### Section 6. Accidental release measures

Personal Precautions:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its vapor/dusts.
Environmental	Shut off leak if without risk.
hazard precautions:	Prevent flow out to river, etc. so as not to badly affect.
Method for containment and cleaning up:	Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Gather up, pack in closed container as much as possible. Carefully collect remnant and move to a safe place.

# Section 7. Handling and storage

Precautions to be taken in handling:		
Safe handling:	Use protective wears and local ventilation equipment, if inhalation or skin	
	contact is foreseen.	

#### Precautions to be taken in storage:

General precautions: Store the material in a sealed container.

Store in a cool, dry, well ventilated and dark place away from incompatible materials.

Section 8. Exposure controls / personal protection			
Exposure guideline:			
Chemical Name		ACGIH(2013)TLV-TWA	OSHA(2006)PEL-TWA
	ame	(mg/m <sup>3</sup> )	(mg/m <sup>3</sup> )
Fluorides (as	F)	2.5	2.5
Facility measures:	Local ve inhalat		total proper ventilation to prevent
Protective ware:	Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, impervious gloves, protective wear, protective boots.		
Section 9. Physi	ical and c	hemical properties	
Color and Form:	White so	lid	
Chemical formula:	$YbF_3$		
Formula weight:	230.0		
Melting point:	1157 °C		

Melting point:	1157 °C
Boiling point:	2230 °C
Density:	$8.2 \mathrm{g/cm^3}$
Water solubility:	Water: Insoluble
Flammable:	Nonflammable
Oxidation:	None

## Section10. Stability and reactivity

Stability:

Stable in closed container at room temperature.

Reactvity

Incompatibility: Acids

# Section11. Toxicological information

Acute toxicity:	GHS : No data available
Skin corrosive / irritation:	GHS: Category 2; Causes skin irritation
Serious eye damage / irritation:	GHS: Category 2; Causes serious eye irritation
Respiratory/ skin sensitization:	GHS : No data available
Germ cell mutagenicity:	GHS : No data available
Carcinogenicity:	GHS : No data available
Reproductive toxicity:	GHS : No data available
Specific target organ toxicity	
-single exposure:	$\operatorname{GHS}$ : Category 3; May cause respiratory irritation

Specific target organ toxicity

-repeated exposure: GHS: No data available

Section 12. Ecological informat	ion
Ecotoxicity:	
Hazardous to the aquatic environment	
-acute toxicity:	GHS; No data available
-chronic toxicity:	GHS; No data available
Hazardous to the ozone layer	GHS; No data available
	No Freon or Halon
Fish toxicity:	No data available
Degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available

### Section13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

UN classification:	Not hazardous
UN number:	None
HS code:	2846.90
Marine pollution:	None
Precautions:	Container should be transported in a secure position, in a well-ventilated vehicle.

### Section 15. Regulatory information

 $TSCA \ inventory \\ \vdots listed$ 

Please refer to any other local / national measures that may be relevant.

### Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.