

Revision Date 16-Nov-2010

Revision Number 2

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

**Product Description:** Yttrium(III) chloride hexahydrate  
**Cat No.** 199180000; 199180500; 199182500  
**Synonyms** Yttrium trichloride hexahydrate.

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

**Recommended Use** Laboratory chemicals  
**Uses advised against** No Information available

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

**Company**

Acros Organics BVBA  
 Janssen Pharmaceuticaaan 3a  
 2440 Geel, Belgium

**E-mail address** begel.sdsdesk@thermofisher.com

**Emergency Telephone Number**

For information in the US, call: 800-ACROS-01  
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99  
 Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300  
 CHEMTREC Phone Number, Europe: 703-527-3887

## 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Specific target organ systemic toxicity (single exposure)	Category 3

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

*For the full text of the R phrases mentioned in this Section, see Section 16*

**Symbol(s)** Xn - Harmful  
**R -phrase(s)** none  
**Risk Combination Phrases** R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed  
 R36/37/38 - Irritating to eyes, respiratory system and skin

## 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

Warning

### Hazard Statements

H319 - Causes serious eye irritation  
 H302 - Harmful if swallowed  
 H335 - May cause respiratory irritation  
 H332 - Harmful if inhaled  
 H315 - Causes skin irritation  
 H312 - Harmful in contact with skin

### Precautionary Statements - EU (§28, 1272/2008)

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P301+ P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

### Other Hazards

No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
Yttrium chloride (YCl <sub>3</sub> ), hexahydrate 10025-94-2	EEC No. 233- 801-0	99.99	10025-94-2	Xn; R20/21/22 Xi; R36/37/38	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332)	-

**For the full text of the R phrases mentioned in this Section, see Section 16**

## 4. FIRST AID MEASURES

### Description of first aid measures

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes Obtain medical attention
<b>Ingestion</b>	Clean mouth with water Get medical attention
<b>Inhalation</b>	Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Obtain medical attention
<b>Notes to Physician</b>	Treat symptomatically

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

#### **Extinguishing media which must not be used for safety reasons**

No information available.

### Special hazards arising from the substance or mixture

Non-combustible

### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

### Environmental precautions

Prevent further leakage or spillage if safe to do so

### Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal Do not let this chemical enter the environment

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid contact with skin and eyes Do not breathe dust Do not breathe vapors or spray mist Do not ingest

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place Keep container tightly closed

### Specific End Uses

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### Exposure limits

Component	European Union	The United Kingdom	France	Belgium	Spain
Yttrium chloride (YCl <sub>3</sub> ), hexahydrate					VLA-ED: 1 mg/m <sup>3</sup>

Component	Italy	Portugal	The Netherlands	Finland	Denmark
Yttrium chloride (YCl <sub>3</sub> ), hexahydrate		TWA: 1 mg/m <sup>3</sup>			

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

#### Exposure controls

##### Engineering Measures

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

##### Personal protective equipment

###### Eye Protection

Goggles

###### Hand Protection

Protective gloves

###### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

###### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

##### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

##### Environmental exposure controls

No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical State

Solid

### Appearance

White

### odor

No information available

### pH

No information available.

### Vapor Pressure

No information available.

### Vapor Density

No information available.

### Boiling Point/Range

No information available.

### Melting Point/Range

100°C / 212°F

### Flash Point

No information available.

### Water Solubility

soluble

### Specific Gravity

2.1800

### Molecular Formula

Cl<sub>3</sub> Y . 6 H<sub>2</sub> O

### Molecular Weight

303.35

## 10. STABILITY AND REACTIVITY

### Reactivity

#### Chemical Stability

Hygroscopic.

#### Possibility of Hazardous Reactions

**Hazardous Polymerization** No information available.  
**Hazardous Reactions .** No information available.

**Conditions to Avoid**  
Incompatible products, Exposure to moist air or water.

**Incompatible Materials**  
Strong oxidizing agents.

**Hazardous Decomposition Products**  
Hydrogen chloride gas.

## 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

#### Component Information

#### Chronic Toxicity

**Carcinogenicity** There are no known carcinogenic chemicals in this product

**Sensitization** No information available.  
**Mutagenic Effects** No information available  
**Reproductive Effects** No information available.  
**Developmental Effects** No information available.  
**Target Organs** No information available.  
**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information  
**Endocrine Disruptor Information** None known

## 12. ECOLOGICAL INFORMATION

#### Toxicity

**Ecotoxicity effects** Do not empty into drains

#### Persistence and degradability

No information available

#### Bioaccumulative potential

No information available.

#### Mobility in soil

No information available.

#### Results of PBT and vPvB assessment

#### Other adverse effects

No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

**Contaminated Packaging**

Empty containers should be taken for local recycling, recovery or waste disposal

### 14. TRANSPORT INFORMATION

**IMDG/IMO**

**UN-No** 3288  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** TOXIC SOLID, INORGANIC, N.O.S.

**ADR**

**UN-No** 3288  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** TOXIC SOLID, INORGANIC, N.O.S.

**IATA**

**UN-No** 3288  
**Hazard Class** 6.1  
**Packing Group** III  
**Proper Shipping Name** TOXIC SOLID, INORGANIC, N.O.S.\*

### 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Inventories**

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
Yttrium chloride (YCl <sub>3</sub> ), hexahydrate	233-801-0	-		-	-	-	-	-	-	-	-

**Legend****TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**EINECS/ELINCS** - European Inventory Lists**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**CHINA** - China Inventory of Existing Chemical Substances**AICS** - Inventory of Chemical Substances**KECL** - Existing and Evaluated Chemical Substances**Chemical Safety Assessment**

**16. OTHER INFORMATION****Text of R phrases mentioned in Section 2-3**

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

**Revision Date** 16-Nov-2010**Revision Summary** Not applicable**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006****Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

**End of Safety Data Sheet**