

Material Safety Data Sheet

Yttrium(III)oxide

Revision Date: 10/03/2011

Date Issued: 01/03/2007

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

Product name	Yttrium(III)oxide, Nanopowder
Product code	NO-0030-HP
Supplier	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D-74076 Heilbronn Germany
Telephone	+49 (0)7131 - 898390
Fax	+49 (0)7131 - 89839109
Emergency telephone	+49 (0)179 - 5322578
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (67/548/EEC or 1999/45/EC)

Irritating to eyes, respiratory system and skin.

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion/irritation, Category 2, H315

Serious eye damage/Eye irritation, Category 2, H319

Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation, Category 3, H335

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2.2 Label elements

Labelling (67/548/EEC or 1999/45/EC)

Hazard description:

Label for supply



Xi Irritant

Information pertaining to particular dangers for man and environment

Risk phrases

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

Safety phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36: Wear suitable protective clothing.

Labelling (REGULATION (EC) No 1272/2008, GHS)

Hazard statements



Warning

H-phrases

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

Precautionary statements

P-phrases

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P280: Wear protectic gloves/protective clothing/eye protection/face protection.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

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P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Yttrium(III)oxide, 99.9 %
CAS No.	1314-36-9
Empirical Formula	Y ₂ O ₃
Molecular weight	225.81 amu

4 FIRST AID MEASURES

General	Contaminated clothing should be removed and washed before being reused.
Inhalation	Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen.
Ingestion	Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.
Skin	Wash the skin immediately with soap and water.
Eyes	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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5 FIRE FIGHTING MEASURES

Extinguishing media	Suitable: Non combustible. Use extinguishing media appropriate to surrounding fire conditions.
Special fire fighting procedures	No special procedures required.
Unusual fire & explosion hazards	Emission of toxic fumes
Protective measures in fire	Wear self-contained respirator as combustion may produce hazardous fumes.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions during spill	Wear protective clothing and avoid inhalation of powder, fume and vapor as well as skin or eye contact.
Precautions to protect environment	Avoid washing into water courses. Avoid contaminating public drains or water supply.
Spill cleanup methods	Avoid contact with skin or inhalation of spillage, dust or vapor, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

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7 HANDLING AND STORAGE

Handling precautions

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage precautions

Keep closed. Store at moderate temperatures in dry, well ventilated area.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Protective equipment

Safety goggles. Chemical resistant gloves. Protective clothing. Respirator.

Process control measures

Provide eyewash station and safety shower. Use engineering controls to reduce air contamination to permissible exposure levels.

Ventilation

Provide adequate general and local exhaust ventilation.

Respirators

Use high efficiency particulate respirator with appropriate filter.

Other protection

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Solid

Odor/taste

No characteristic odor.

PH

N/A

Boiling Point

N/A

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Melting Point	2435 °C
Flash Point	N/A
Flammability	N/A
Autoignition Temp	N/A
Oxidizing Properties	N/A
Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	N/A
SG/Density	5.01 g/cm ³
Partition Coefficient	N/A
Viscosity	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Evaporation Rate	N/A
Bulk Density	N/A
Decomposition Temp.	N/A
Solvent Content	N/A
Water Content	N/A
Surface Tension	N/A
Conductivity	N/A
Solubility in Water	Insoluble

10 STABILITY AND REACTIVITY

Stability	No particular stability concerns.
Conditions to avoid	Acids, Air
Hazardous Decomposition	

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Products Consistency of decomposition products
unknown.

11 TOXICOLOGICAL INFORMATION

Ingestion Harmful if swallowed.

Inhalation May be harmful if inhaled. Material is irritating
tomucous membranes and upper respiratory
tract.

Skin May cause irritation and allergic reaction.

Eyes May cause irritation and allergic reaction.

12 ECOLOGICAL INFORMATION

Do not release material to the environment

13 DISPOSAL CONSIDERATIONS

Disposal method Contact specialist disposal companies. Disposal must be
made according to Local Authority requirements. Recover
and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

General Not classified as dangerous for transport
purposes.

UN No. 0

Road transport notes Not classified as dangerous for road transport.

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Rail transport notes

Not classified as dangerous for rail transport.

Sea transport notes

Not classified as dangerous for sea transport.

Air transport notes

Not classified as dangerous for air transport.

15 REGULATORY INFORMATION

In accordance with local and national regulations.

16 OTHER INFORMATION

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