

1- Product and Company Identification

1.1 Product identification

Trade name:	Y ₂ O ₃
Chemical Name:	Yttrium Oxide
Chemical formula:	Y ₂ O ₃
Cas number:	1314-36-9

1.2 Identified use: Laboratory chemicals, Manufacture of substances

1.3 Manufacturer/Supplier: Nanoe SAS
6 rue des Frênes
91160 Ballainvilliers
France
+33 9 81 98 33 64

1.4 Emergency Number: +33 1 45 42 59 59 (24/24h)

2- Hazards identification

2.1 Classification

Directives 67/548/CEE or 1999/45/CE:
Irritating to eyes, respiratory system and skin

Regulation CLP EC 1272/2008:
Skin irritation (Category 2), H315
Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]
Pictogram



Hazard statement(s)
H315 Causes skin irritation
H335 May cause respiratory irritation

Precautionary statement(s)
P261 Avoid breathing dust
P264 Wash skin thoroughly after handling
P271 Use only in a well-ventilated area
P280 Wear protective gloves
P312 Call a poison center or doctor if you feel unwell
P321 Specific treatment (see supplemental first aid instructions on this label)

P362 Take off contaminated clothing and wash before reuse
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed
 P501 Dispose of contents/container to an approved waste disposal plant

Supplement hazard statement
 None

According to European Directive 67/548/EEC as amended

R-phrase(s)
 R36/37/38 Irritating to eyes, respiratory system and skin
 S-phrase(s)
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

2.3 Other hazards

None

3- Composition/Data on components

Cas number	EC number	Substances	Classification according 67/548/CEE directive	Classification according 1272/2008 regulation	Percentage %
1314-36-9	215-233-5	Yttrium oxide	Irritating R36/37/38	Irritating H315, H335	≥ 99
-	-	Organic additives			< 1
-	-	Loss of Ignition			< 2.5

4- First aid measures

4.1 Description of first aid measures

After inhalation: Supply fresh air.
 If required, provide artificial respiration.
 Call immediately a doctor while keeping patient warm

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After swallowing: Consult immediately a doctor.

After eye contact: Rinse opened eye for at least 15 minutes under running water.
 Seek immediate medical advice.

4.2 Principal symptoms:

No data available

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

Treat symptomatically.

5- Fire Fighting Measures

5.1 Suitable extinguishing agents:

All firefighting measures could be used with that product

5.2 Special hazards arising from the substance or mixture:

Non-combustible, non-explosive.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

6- Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8

For disposal see section 13

7- Handling and storage

7.1 Handling precautions:

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation of places where dust is formed. For precautions see sections 2.2

7.2 Conditions for safe storage, including any incompatibilities:

Keep containers tightly closed in a dry and well-ventilated place
Keep in dry place.

7.3 Specific end use(s):

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

8- Exposure controls and personal protection

8.1 Control parameters

Component	Cas-No	Value	Control parameters	Basis
Yttrium oxide	1314-36-9	TWA	1 mg/m ³	USA. ACGIH Threshold Limit Values (TLV)

8.2 Exposure controls:

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

Personal protective equipment

Eye/Face protection

Safety glasses with side-shields conforming to EN166

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

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Use suitable breathing equipment (FFP3 masks)

Control of environmental exposure

Do not let product enter drains

9- Properties of the product

Physical state:	Powder
Color:	White to yellowish
Odor:	Odorless
Odor threshold:	no data available
pH:	no data available
Melting point:	2410°C
Boiling point:	4300°C
Flash point:	not applicable
Evaporation rate:	no data available
Flammability:	no data available
Upper/lower flammability or explosive limits:	no data available
Vapor pressure:	no data available
Vapor density:	no data available
Theoretical Density:	5,03 g/cm ³
Water solubility:	Insoluble in water
Partition coefficient: n-octanol/water:	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
Viscosity:	no data available
Explosive properties:	no data available
Oxidizing properties:	no data available

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

No data available

10.5 Incompatible materials

Strong acids, Carbon dioxide (CO₂), Ammonium salts

10.6 Hazardous decomposition products

Other decomposition products: no data available. In the event of fire: see section 5

11- Toxicological information

Acute toxicity:	no data available
Inhalation:	no data available
Dermal:	no data available
LD50 Intraperitoneal	rat- 230mg/kg
Skin corrosion/irritation:	no data available
Serious eyes damage/eye irritation:	no data available
Respiratory of skin sensitization	no data available
Germ cell mutagenicity	no data available
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
ACGIH	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 ACGIH
NTP	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 NTP
OSHA	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 OSHA
Reproductive toxicity	no data available
Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation
Specific target organ toxicity - repeated exposure	no data available
Aspiration hazard	no data available

Additional information	Rare earth compounds may cause delayed blood clotting leading to hemorrhages. Inhalation of rare earths may cause sensitivity to heat, itching and increased awareness of odor and taste. Coagulation abnormalities. Gastrointestinal disturbance. Skin contact or inhalation may result in: asthma, cough, muscles, damage to the lungs. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
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12- Ecological information

Toxicity	no data available
Persistence and degradability	no data available
Bio accumulative potential	no data available
Mobility in soil	no data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required /not conducted
Other adverse effects	no data available

13- Disposal considerations

Waste treatment methods

Product:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging:

Dispose of as unused product.

14- Transportation information

DOT (US) / IMDG / IATA / ADR / RID: not dangerous goods

15- Regulatory Information

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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

15.2 Chemical Safety Assessment

No data available

16- Other Information**Full text of H-statements referred to under sections 2 and 3.**

H315 Causes skin irritation

H335 May cause respiratory irritation

NFPA Rating

Health hazard: 2

Fire hazard: 0

Reactivity hazard: 1.

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. Nanoe shall not be held liable for any damage resulting from handling or from contact with the above product.