

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: Niobium Pentoxide Combustion Reagent, OEA
Catalogue no: R11200
SDS reference no: R11200
Brand: OEA Labs
EC index no(s): 215-213-6
REACH no: The annual tonnage does not require registration.
CAS no(s): Nb2O5[1313-96-8]

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

Identified uses: Elemental analysis scientific instrumentation. Not for pharmaceutical, domestic or other uses.

1.3 Details of the supplier of the safety data sheet

Company name: OEA Laboratories Limited
The Generator Quay House The
Gallery, Kings Wharf
The Quay, Exeter
EX2 4AN
United Kingdom
Telephone: +44 (0)1579 384174
Email: sales@oealabs.com

1.4 Emergency telephone number

Telephone: +44 (0)1579 384174

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008

Skin corrosion/irritation (Category 2), H315
Specific organ toxicity, single exposure; Respiratory tract irritation (Category 3), H335
Serious eye damage/eye irritation (Category 2A), H319

2.2 Labelling elements according to Regulation (EC) No 1272/2008

Pictogram(s):



GHS07



GHS08

GHS07

Signal word: Warning

Hazard statement(s):

H315 Causes skin irritation.
H335 May cause respiratory irritation.
H319 Causes serious eye irritation.

Precautionary statement(s):

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Restricted to professional users.

2.2 Other hazards

SECTION 3. Composition/information of ingredients

3.1 Substances

Synonyms: Niobium pentoxide/Diniobium pentaoxide
Formula: Nb2O5
Molecular weight: 265.81
Components:

Niobium (V) Oxide Concentration: ~100%

CAS No 1313-96-8, EC No 215-213-6, H315, Skin corrosion/irritation, Category 2; H335, Specific organ toxicity, single exposure; Respiratory tract irritation, Category 3; H319, Serious eye damage/eye irritation, Category 2A;

SECTION 4. First aid measures

4.1 Description of first aid measures

General advice:

Consult a physician. Show this safety data sheet to the doctor in attendance.

If Inhaled:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of skin contact:

Wash skin thoroughly. Remove contaminated clothing and wash before re-use. In severe cases obtain medical attention.

In case of eye contact:

Irrigate thoroughly with water for at least 10 minutes and seek medical attention.

If swallowed:

Never give anything by mouth to an unconscious person. Wash out mouth thoroughly with water. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide that suit the surrounding fire.

5.2 Special hazards arising from the substance or mixture

If this product is evolved in a fire, the following can be released: Metal oxide as niobium oxides.

5.3 Advice for firefighters

Wear self contained breathing apparatus.

5.4 Further information

Wear full protective suit.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

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

6.4 Reference to other sections

For safe handling see Section 7. For disposal see Section 13. For personal protection equipment see Section 8.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation of the workplace. Avoid contact with eyes and skin. Avoid formation of dust, vapours and aerosols. Follow normal measures for fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly sealed. Store in a cool, dry place.

7.3 Specific end uses

No further relevant information available.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters:

Niobium (V) Oxide

CAS No 1313-96-8, TWA, 10mg/m³, UK, EH40 WEL

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. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH(US) or EN166.

Skin protection:

Handle with gloves to specification EU Directive 89/686/EEC and EN374. Inspect prior to use. Use proper glove removal practice to avoid contact with product. Wash and dry hands.

Body protection:

Impervious clothing selected according to the concentration and amount of product at the specific workplace.

Respiratory protection:

For nuisance exposures use type P95(US) or P1(EU EN143) particle respirator. For higher levels use type OV/AG/P99(US) or ABEK-P2(EU EN143) respirator cartridges.

Environmental protection:

Avoid formation of dust, vapours and aerosols.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Granules
Colour:	Off white
Odour:	Odourless
Odour threshold:	No data available
pH:	No data available
Melting point:	1512°C
Boiling point:	No data available
Flash point:	No data available
Flammability solid/gas:	No data available
Upper/lower flammability or explosive limits:	No data available
Water solubility:	No data available
Autoignition temp:	No data available
Decomp temperature:	No data available
Explosive properties:	No data available
Oxidising 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

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidising agents

10.6 Hazardous decomposition products

No data available

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD50 Oral - mouse - >4,000mg/kg
Behavioral: muscle contraction or spasticity.
Lungs, thorax or respiration: acute pulmonary edema
Liver: hepatitis (hepatocellular necrosis), diffuse

Skin corrosion/irritation:

No data available

Serious eye damage/eye irritation:

No data available

Respiratory or skin sensitisation:

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.

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

Potential health effects - inhalation:

May be harmful if inhaled. Causes respiratory tract irritation.

Potential health effects - ingestion:

May be harmful if swallowed.

Potential health effects - skin:

May be harmful if absorbed through the skin. Causes skin irritation.

Potential health effects - eyes:

Causes serious eye irritation.

Signs and symptoms of exposure:

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Additional information:

RTECS: QU0500000

SECTION 12. Ecological information

12.1 Toxicity

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Toxicity to bacteria: 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

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13. Disposal considerations

13.1 Waste treatment methods

Product:

Offer surplus and non-recyclable material to a licensed professional waste disposal company.

Contaminated packaging:

Dispose of as unused product.

SECTION 14. Transport information

14.1 UN number

ADR/RID/IATA/IMDG: Not dangerous goods

14.2 UN proper shipping name

ADR/RID/IATA/IMDG: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID/IATA/IMDG: Not dangerous goods

14.4 Packaging group

ADR/RID/IATA/IMDG: Not dangerous goods

14.5 Environmental hazards

ADR/RID/IATA/IMDG: Not dangerous goods

14.6 Special precautions for user

Not dangerous goods

14.7 Shipping quantities

ADR LQ maximum:	Not dangerous goods
ADR EQ code:	Not dangerous goods
ADR EQ IP/pkg:	Not dangerous goods
IATA LQ PInstruction:	Not dangerous goods
IATA LQ IP/pkg:	Not dangerous goods
IATA EQ code:	Not dangerous goods
IATA EQ IP/pkg:	Not dangerous goods
De minimus:	Not dangerous goods

SECTION 15. Regulatory information

This safety data sheet 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

SECTION 16 Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used 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. OEA Laboratories Limited shall not be held liable for any damage resulting from the handling or contact with the above product. See www.oelabs.com for terms and conditions of sale.