

## Section 1 - Identification

**Product Name** Platinum, 0.5% on alumina spheres, reduced

|                                |  |
|--------------------------------|--|
| <b>Product Code</b>            | <b>44796</b>   |
| <b>Address</b>                 | ThermoFisher Scientific Australia Pty Ltd<br>5 Caribbean Drive, Scoresby<br>VICTORIA 3179, Australia |
| <b>Emergency Tel.</b>          | <b>CHEMTREC®</b><br><b>03 9757 4559 or +613 9757 4559</b>  |
| <b>Telephone / Fax Numbers</b> | Tel: 1300 735 292<br>Fax: 1800 067 639   |
| <b>E-mail address</b>          | ANZinfo@thermofisher.com   |

**Recommended Use** Laboratory chemicals.

**Uses advised against** This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling and storing these substances. This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

## Section 2 - Hazard(s) Identification

### Classification under Safe Work Australia

Classified as not hazardous according to criteria of Safe Work Australia.

**Physical hazards**  
No hazards identified

**Health hazards**  
No hazards identified

**Environmental hazards**  
No hazards identified

**Label Elements** None required

**Other information**

## Section 3 - Composition and Information on Ingredients

| Component      | CAS No    | Weight % |
|----------------|-----------|----------|
| Aluminum oxide | 1344-28-1 | 99.5     |
| Platinum       | 7440-06-4 | 0.5      |

## Section 4 - First Aid Measures

|  |   |
|--|---|
| <b>Inhalation</b>                          | Remove to fresh air. Get medical attention immediately if symptoms occur.   |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.                   |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur. |
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.         |
| <b>Self-Protection of the First Aider</b>  | No special precautions required.  |
| <b>First Aid Facilities</b>                | Eyewash, safety shower and washroom.  |
| <b>Most important symptoms and effects</b> | None reasonably foreseeable.  |
| <b>Notes to Physician</b>                  | Treat symptomatically.  |

## Section 5 - Fire Fighting Measures

**Suitable Extinguishing Media**  
approved class D extinguishers. Do not use water or foam.

**Extinguishing media which must not be used for safety reasons**  
No information available.

**Hazardous Decomposition Products**  
Fumes of aluminum or aluminum oxide, Platinum oxide.

**Specific Hazards Arising from the Chemical**  
Thermal decomposition can lead to release of irritating gases and vapors.

**Special protective equipment and precautions for fire fighters**  
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6 - Accidental Release Measures

**Emergency procedures**  
Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

**Environmental Precautions**  
Should not be released into the environment. See Section 12 for additional Ecological Information. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean Up**

**Clean-up methods - small spillage**

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

**Clean-up methods - large spillage**

Not applicable, packaged goods.

**Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

**Precautions for Safe Handling**

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Conditions for Safe Storage, Including any Incompatibilities**

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

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

## Section 8 - Exposure Controls and Personal Protection

**Exposure limits**

**AUS** - Exposure Standards for Atmospheric Contaminants in the Occupational Environment - Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)]

Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)]

updated in August, 2005. Safe Work Australia **ACGIH** - Threshold Limit Values - Ceiling (TLV-C) guidelines by the American Conference of Governmental Industrial Hygienists (ACGIH) for controlling worker exposure to airborne chemical concentrations in the workplace. **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **DE** - MAK and BAT values of Hazardous Chemical Compounds in the Work Area. Published by German Research Foundation on July 1, 2011

| Component      | Australia                 | New Zealand WEL           | ACGIH TLV                | The United Kingdom  | Germany  |
|----------------|---------------------------|---------------------------|--------------------------|---|--|
| Aluminum oxide | TWA: 10 mg/m <sup>3</sup> | TWA: 10 mg/m <sup>3</sup> | TWA: 1 mg/m <sup>3</sup> | STEL: 30 mg/m <sup>3</sup> 15 min<br>STEL: 12 mg/m <sup>3</sup> 15 min<br>TWA: 10 mg/m <sup>3</sup> 8 hr<br>TWA: 4 mg/m <sup>3</sup> 8 hr | TWA: 1.25 mg/m <sup>3</sup> (8 Stunden). AGW - exposure factor 2<br>TWA: 10 mg/m <sup>3</sup> (8 Stunden). AGW - exposure factor 2<br>TWA: 4 mg/m <sup>3</sup> (8 Stunden). MAK<br>TWA: 1.5 mg/m <sup>3</sup> (8 Stunden). MAK |
| Platinum       | TWA: 1 mg/m <sup>3</sup>  | TWA: 1 mg/m <sup>3</sup>  | TWA: 1 mg/m <sup>3</sup> | STEL: 15 mg/m <sup>3</sup> 15 min<br>TWA: 5 mg/m <sup>3</sup> 8 hr  | TWA: 1 mg/m <sup>3</sup> (8 Stunden). AGW -  |

**Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

**Exposure Controls**

**Engineering Measures**

None under normal use conditions.

**Personal protective equipment**

**Eye Protection**

Wear safety glasses with side shields (or goggles) (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications)

**Hand Protection**

Protective gloves

| Glove material | Breakthrough time | Glove thickness | AUS/NZ Standard | Glove comments        |
|----------------|-------------------|-----------------|-----------------|-----------------------|
| Natural rubber | See manufacturers | -               | AS/NZS 2161     | (minimum requirement) |
| Nitrile rubber | recommendations   |                 |                 |                       |
| Neoprene       |                   |                 |                 |                       |
| PVC            |                   |                 |                 |                       |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.  
(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Skin and body protection** Long sleeved clothing

**Respiratory Protection** Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use and maintenance of respiratory protective devices

**Recommended Filter type:** Particle filter (or AUS/NZ equivalent)

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

## Section 9 - Physical and Chemical Properties

### Information on basic physical and chemical properties

|  |                          |  |
|--|--------------------------|--|
| <b>Appearance</b>                              |                          |  |
| <b>Physical State</b>                          | Solid Pellets            |  |
| <b>Odor</b>                                    | Odorless                 |  |
| <b>Odor Threshold</b>                          | No data available        |  |
| <b>pH</b>                                      | No information available |  |
| <b>Melting Point/Range</b>                     | No data available        |  |
| <b>Softening Point</b>                         | No data available        |  |
| <b>Boiling Point/Range</b>                     | No information available |  |
| <b>Flash Point</b>                             | No information available | <b>Method -</b> No information available |
| <b>Evaporation Rate</b>                        | Not applicable           | Solid                                    |
| <b>Flammability (solid,gas)</b>                | No information available |  |
| <b>Explosion Limits</b>                        | No data available        |  |
| <b>Vapor Pressure</b>                          | 23 hPa @ 20 °C           |  |
| <b>Vapor Density</b>                           | Not applicable           | Solid                                    |
| <b>Specific Gravity / Density</b>              | No data available        |  |
| <b>Bulk Density</b>                            | No data available        |  |
| <b>Water Solubility</b>                        | Insoluble in water       |  |
| <b>Solubility in other solvents</b>            | No information available |  |
| <b>Partition Coefficient (n-octanol/water)</b> |                          |  |
| <b>Autoignition Temperature</b>                | No data available        |  |
| <b>Decomposition Temperature</b>               | No data available        |  |
| <b>Viscosity</b>                               | Not applicable           | Solid                                    |
| <b>Explosive Properties</b>                    | No information available |  |
| <b>Oxidizing Properties</b>                    | No information available |  |

### Other information

## Section 10 - Stability and Reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                       | None known, based on information available                   |
| <b>Stability</b>                        | Stable under normal conditions.                              |
| <b>Conditions to Avoid</b>              | Heat, flames and sparks.                                     |
| <b>Incompatible Materials</b>           | Acids, Strong bases, Halogens, halocarbons, Oxidizing agent. |
| <b>Hazardous Decomposition Products</b> | Fumes of aluminum or aluminum oxide. Platinum oxide.         |
| <b>Hazardous Polymerization</b>         | No information available.                                    |

## Section 11 - Toxicological Information

### Information on Toxicological Effects

#### Product Information

|                            |  |
|----------------------------|--|
| <b>(a) acute toxicity;</b> |  |
| <b>Oral</b>                | Based on available data, the classification criteria are not met |
| <b>Dermal</b>              | No data available  |
| <b>Inhalation</b>          | No data available  |

#### Toxicology data for the components

| Component      | LD50 Oral                                    | LD50 Dermal | LC50 Inhalation                        |
|----------------|--|-------------|--|
| Aluminum oxide | > 5000 mg/kg ( Rat )<br>(OECD Guideline 401) |             | > 2.3 mg/l 4 h<br>(OECD Guideline 403) |

**(b) skin corrosion/irritation;** No data available

**(c) serious eye damage/irritation;** No data available

**(d) respiratory or skin sensitization;**

|                    |                   |
|--------------------|-------------------|
| <b>Respiratory</b> | No data available |
| <b>Skin</b>        | No data available |

**(e) germ cell mutagenicity;** No data available

**(f) carcinogenicity;** No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component      | Australia | New Zealand | New South Wales | Western Australia | IARC | EU | UK | Germany             |
|----------------|-----------|-------------|-----------------|-------------------|------|----|----|---------------------|
| Aluminum oxide |           |             |                 |                   |      |    |    | Cat. 2 (Fibre dust) |

**(g) reproductive toxicity;** No data available

**(h) STOT-single exposure;** No data available

**(i) STOT-repeated exposure;** No data available

**Target Organs** No information available.

(j) aspiration hazard; Not applicable  
Solid

Symptoms / effects, both acute and delayed No information available

## Section 12 - Ecological Information

|  |   |
|--|---|
| <b>Ecotoxicity effects</b>                   | May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system. |
| <b>Persistence and Degradability</b>         | Product contains heavy metals. Discharge into the environment must be avoided. Special pre-treatment is necessary |
| <b>Persistence</b>                           | Insoluble in water, May persist.  |
| <b>Degradability</b>                         | Not relevant for inorganic substances.  |
| <b>Degradation in sewage treatment plant</b> | Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.   |
| <b>Bioaccumulative Potential</b>             | May have some potential to bioaccumulate Product has a high potential to bioconcentrate                           |
| <b>Mobility</b>                              | Spillage unlikely to penetrate soil. Is not likely mobile in the environment due its low water solubility         |
| <b>Endocrine Disruptor Information</b>       | This product does not contain any known or suspected endocrine disruptors   |
| <b>Persistent Organic Pollutant</b>          | This product does not contain any known or suspected substance  |
| <b>Ozone Depletion Potential</b>             | This product does not contain any known or suspected substance  |

## Section 13 - Disposal Considerations

|  |  |
|--|--|
| <b>Waste from Residues/Unused Products</b> | Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations. |
| <b>Contaminated Packaging</b>              | Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.   |
| <b>Other Information</b>                   | Chemical wastes should be disposed through a licensed commercial waste collection service.   |

## Section 14 - Transport Information

IMDG/IMO Not regulated

ADG Not regulated

IATA Not regulated

**Environmental hazards** No hazards identified

**Special Precautions** No special precautions required

**Additional information** None known

## Section 15 - Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture****National Regulations****Australia**

See section 8 for national exposure control parameters.

**Standard for the Uniform Scheduling of Medicines and Poisons**

No poison schedule number allocated.

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

| Component                  | Australian Industrial Chemicals Introduction Scheme (AICIS) | Additional information |
|----------------------------|---|------------------------|
| Aluminum oxide - 1344-28-1 | Present   | -                      |
| Platinum - 7440-06-4       | Present   | -                      |

**Australian - Illicit Drug Precursors/Reagents Substance List**

This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling and storing these substances.

**Chemicals of Security Concern**

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

| Component            | Australian - Illicit Drug Precursors/Reagents Substance List | Chemicals of Security Concern |
|----------------------|--|-------------------------------|
| Platinum - 7440-06-4 | Category 2   |                               |

**Legend**

Category 2 - Chemicals and apparatus that require an End User Declaration when sold to non-account customers

**National pollutant inventory**

Not applicable

**Prohibition or notification/licensing requirements**

Shown below are details of specific prohibition/notifications or licensing requirements when they apply.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

**International Inventories**

| Component      | AICS | NZIoC | EINECS    | ELINCS | TSCA | DSL | NDSL | PICCS | ENCS | ISHL | IECSC | KECL     |
|----------------|------|-------|-----------|--------|------|-----|------|-------|------|------|-------|----------|
| Aluminum oxide | X    | X     | 215-691-6 | -      | X    | X   | -    | X     | X    | X    | X     | KE-01012 |
| Platinum       | X    | X     | 231-116-1 | -      | X    | X   | -    | X     | X    |      | X     | KE-28808 |

**Legend:** X - Listed. '-' - Not Listed. **KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**International Regulations****Ozone Depletion Potential**

This product does not contain any known or suspected substance

**Persistent Organic Pollutant**

This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

Basel convention on the control of transboundary movements of hazardous wastes and their disposal  
Not applicable.

| Component      | CAS No    | OECD HPV       | Restriction of Hazardous Substances (RoHS) | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|----------------|-----------|----------------|--|---|--|
| Aluminum oxide | 1344-28-1 | Listed         | Not applicable                             | Not applicable  | Not applicable   |
| Platinum       | 7440-06-4 | Not applicable | Not applicable                             | Not applicable  | Not applicable   |

Authorisation/Restrictions according to EU REACH Not applicable

## Section 16 - Other Information

### Legend

**AICS** - Australian Inventory of Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**IECSC** - Chinese Inventory of Existing Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**TWA** - Time Weighted Average  
**IARC** - International Agency for Research on Cancer  
**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association  
**MARPOL** - International Convention for the Prevention of Pollution from Ships  
**NZS 5433:2012** - Transport of Dangerous Goods on Land  
**LD50** - Lethal Dose 50%  
**EC50** - Effective Concentration 50%  
**WEL** - Workplace Exposure Limit  
**DNEL** - Derived No Effect Level  
**POW** - Partition coefficient Octanol:Water  
**vPvB** - very Persistent, very Bioaccumulative  
**VOC** - (Volatile Organic Compound)

**NZIoC** - New Zealand Inventory of Chemicals  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japanese Existing and New Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**CAS** - Chemical Abstracts Service  
**ACGIH** - American Conference of Governmental Industrial Hygienists  
 Predicted No Effect Concentration (PNEC)  
**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code  
**ADG** Australian Code for the Transport of Dangerous Goods by Road and Rail  
**OECD** - Organisation for Economic Co-operation and Development  
**LC50** - Lethal Concentration 50%  
**ATE** - Acute Toxicity Estimate  
**RPE** - Respiratory Protective Equipment  
**NOEC** - No Observed Effect Concentration  
**BCF** - Bioconcentration factor  
**PBT** - Persistent, Bioaccumulative, Toxic

### Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>  
 Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

**Physical hazards** On basis of test data  
**Health Hazards** Calculation method  
**Environmental hazards** Calculation method

### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Revision Date** 20-Nov-2022  
**Revision Summary** Not applicable.



**This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).**

#### Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

## End of Safety Data Sheet