

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Standard Zircon

SDS-Identcode : 130000030943

#### Manufacturer or supplier's details

Company : The Chemours Chemical (Shanghai) Co., Ltd.

Address : 9F, SCG Parkside, 868 Yinghua Road, Pudong New District  
201204, Shanghai, China

Telephone : 86 400 8056 528

Emergency telephone number : 86 532 8388 9090

E-mail address : SDS.ChinaPSR@chemours.com

Telefax : 86 21 2612 0862

#### Recommended use of the chemical and restrictions on use

Recommended use : Metal casting  
Foundry mould  
Refractory barrier  
Ceramic manufacture

Restrictions on use : Abrasive blasting  
For industrial use only.

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance	: solid, dry, free flowing granules
Colour	: white
Odour	: odourless

Not a hazardous substance or mixture.

#### GHS Classification

|| Not a hazardous substance or mixture.

#### GHS label elements

|| No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

### Physical and chemical hazards

Not classified based on available information.

### Health hazards

Not classified based on available information.

### Environmental hazards

Not classified based on available information.

### Other hazards which do not result in classification

None known.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

### Components

Chemical name	CAS-No.	Concentration (% w/w)
Zircon	14940-68-2	$\geq 90$ - $\leq 100$

## 4. FIRST AID MEASURES

If inhaled	: If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	: Wash with water and soap as a precaution. Get medical attention if symptoms occur.
In case of eye contact	: Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	: If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and delayed	: irritant effects
Protection of first-aiders	: No special precautions are necessary for first aid responders.
Notes to physician	: Treat symptomatically and supportively.

## 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Not applicable  
Will not burn

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version 3.0	Revision Date: 2025/05/08	SDS Number: 2874708-00014	Date of last issue: 2024/10/17 Date of first issue: 2018/06/07
----------------	------------------------------	------------------------------	---

---

Unsuitable extinguishing media	: Not applicable Will not burn
Specific hazards during fire-fighting	: Exposure to combustion products may be a hazard to health.
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

---

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
Environmental precautions	: Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	: Sweep up or vacuum up spillage and collect in suitable container for disposal. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

---

## 7. HANDLING AND STORAGE

### Handling

Technical measures	: See Engineering measures under EXPOSURE
--------------------	---

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

### CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment

Avoidance of contact : None.

#### Storage

Conditions for safe storage : Keep in properly labelled containers.  
Store in accordance with the particular national regulations.

Materials to avoid : No special restrictions on storage with other products.

Packaging material : Unsuitable material: None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Zircon	14940-68-2	PC-TWA	5 mg/m3 (Zirconium)	CN OEL
		PC-STEL	10 mg/m3 (Zirconium)	CN OEL
		TWA	5 mg/m3 (Zirconium)	ACGIH
		STEL	10 mg/m3 (Zirconium)	ACGIH

**Engineering measures** : Ensure adequate ventilation, especially in confined areas.  
Minimize workplace exposure concentrations.

#### Personal protective equipment

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

Filter type : Particulates type

Eye/face protection : Wear the following personal protective equipment:  
Safety glasses

Skin and body protection : Skin should be washed after contact.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

Hand protection	
Material	: Protective gloves
Remarks	: Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. Breakthrough time is not determined for the product. Change gloves often!
Hygiene measures	: If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: solid, dry, free flowing granules
Colour	: white
Odour	: odourless
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: > 2,100 °C
Initial boiling point and boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: Will not burn Not expected to form explosive dust-air mixtures.
Upper explosion limit / Upper	: No data available

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version 3.0	Revision Date: 2025/05/08	SDS Number: 2874708-00014	Date of last issue: 2024/10/17 Date of first issue: 2018/06/07
----------------	------------------------------	------------------------------	---

---

flammability limit

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : Not applicable

Relative vapour density : Not applicable

Relative density : 4.7

Solubility(ies)  
Water solubility : insoluble

Partition coefficient: n-octanol/water : Not applicable

Auto-ignition temperature : No data available

Decomposition temperature : The substance or mixture is not classified self-reactive.

Viscosity  
Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle characteristics  
Particle size : No data available

---

### 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : None known.

Conditions to avoid : None known.

Incompatible materials : None.

Hazardous decomposition products : No hazardous decomposition products are known.

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

### 11. TOXICOLOGICAL INFORMATION

Exposure routes : Skin contact  
Ingestion  
Eye contact

#### Acute toxicity

Not classified based on available information.

#### Components:

##### Zircon:

Acute oral toxicity : LD50 (Mouse): > 200,000 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

#### Components:

##### Zircon:

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation  
Remarks : Based on data from similar materials

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Components:

##### Zircon:

Result : No eye irritation  
Remarks : Based on data from similar materials

#### Respiratory or skin sensitisation

##### Skin sensitisation

Not classified based on available information.

##### Respiratory sensitisation

Not classified based on available information.

#### Components:

##### Zircon:

Test Type : Maximisation Test  
Exposure routes : Skin contact  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : negative

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

---

||Remarks : Based on data from similar materials

### Germ cell mutagenicity

Not classified based on available information.

### Components:

#### Zircon:

||Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative  
Remarks: Based on data from similar materials

### Carcinogenicity

Not classified based on available information.

### Reproductive toxicity

Not classified based on available information.

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

Not classified based on available information.

### Repeated dose toxicity

### Components:

#### Zircon:

||Species : Rat  
NOAEL : > 100 mg/kg  
Application Route : Ingestion  
Exposure time : 17 Weeks  
Remarks : Based on data from similar materials

### Aspiration toxicity

Not classified based on available information.

---

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

### Components:

#### Zircon:

||Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 202  
Remarks: Based on data from similar materials

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

Toxicity to algae/aquatic plants	: EL50 (Raphidocelis subcapitata (freshwater green alga)): > 100 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 201 Remarks: Based on data from similar materials  NOELR (Raphidocelis subcapitata (freshwater green alga)): > 1 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 201 Remarks: Based on data from similar materials
----------------------------------	---

### Persistence and degradability

No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues	: Do not dispose of waste into sewer.  Dispose of in accordance with local regulations.
Contaminated packaging	: Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### International Regulations

#### UNRTDG

UN number	: Not applicable
Proper shipping name	: Not applicable
Class	: Not applicable
Subsidiary risk	: Not applicable
Packing group	: Not applicable
Labels	: Not applicable

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

Environmentally hazardous : no

### IATA-DGR

UN/ID No.	: Not applicable
Proper shipping name	: Not applicable
Class	: Not applicable
Subsidiary risk	: Not applicable
Packing group	: Not applicable
Labels	: Not applicable
Packing instruction (cargo aircraft)	: Not applicable
Packing instruction (passenger aircraft)	: Not applicable

### IMDG-Code

UN number	: Not applicable
Proper shipping name	: Not applicable
Class	: Not applicable
Subsidiary risk	: Not applicable
Packing group	: Not applicable
Labels	: Not applicable
EmS Code	: Not applicable
Marine pollutant	: no

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### National Regulations

#### GB 6944/12268

UN number	: Not applicable
Proper shipping name	: Not applicable
Class	: Not applicable
Subsidiary risk	: Not applicable
Packing group	: Not applicable
Labels	: Not applicable
Marine pollutant	: no

### Special precautions for user

Not applicable

## 15. REGULATORY INFORMATION

### National regulatory information

#### Law on the Prevention and Control of Occupational Diseases

#### Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals	: This product is not listed in the catalogue of hazardous chemicals and it does not meet the definition of hazardous chemicals and its principles of determination.
----------------------------------	--

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218) : Not listed

Hazardous Chemicals for Priority Management under SAWS : Not listed

Catalogue of Specially Controlled Hazardous Chemicals : Not listed

List of Explosive Precursors : Not listed

### Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Not listed

### Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import and Export : Not listed

### Regulation on the Administration of Precursor Chemicals

Catalogue and Classification of Precursor Chemicals : Not listed

### Yangtze River Protection Law

This product does not contain any dangerous chemicals prohibited for inland river transport.

### Regulations of Ozone Depleting Substances Management

List of Controlled Ozone Depleting Substances Import and Export : Not listed

List of Controlled Ozone Depleting Substances : Not listed

### Environmental Protection Law

List of Priority Controlled Chemicals : Not listed

List of Key Controlled New Pollutants : Not listed

## 16. OTHER INFORMATION

Revision Date : 2025/05/08

Other information : Chemours™ and the Chemours Logo are trademarks of The Chemours Company.  
Before use read Chemours safety information.  
For further information contact the local Chemours office or nominated distributors.  
Do not use or resell Chemours™ materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless agreed to by Seller in a

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue:
3.0	2025/05/08	2874708-00014	2024/10/17
			Date of first issue: 2018/06/07

---

written agreement covering such use. For further information, please contact your Chemours representative.

The stated hazards of this material are based on non-inhalable particles that are the bulk fraction of the delivered product. However, if during handling or use the particles are broken down to the inhalable or respirable size range, the dusts may be harmful to the respiratory system. Respirable quartz is an IARC Category 1 carcinogen and applicable exposure limits should be referenced.

This product contains Naturally Occurring Radioactive Materials (NORMs) at levels below U.S. Nuclear Regulatory Commission licensing requirements at 10 CFR 40. Many local jurisdictions are developing new regulations for the disposal of waste containing Naturally Occurring Radioactive Materials (NORM) or Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) above background levels. Consult and comply with current regulations.

For a total dust with aerodynamic diameter of 1  $\mu\text{m}$ , the calculated reference dust level is 2.3  $\text{mg}/\text{m}^3$ . For a total dust with aerodynamic diameter of 5  $\mu\text{m}$ , the calculated reference dust level is 3.4  $\text{mg}/\text{m}^3$ . For a total dust with aerodynamic diameter of 10  $\mu\text{m}$ , the calculated reference dust level is 5.2  $\text{mg}/\text{m}^3$ .

### Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Date format : yyyy/mm/dd

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
CN OEL : Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

ACGIH / TWA : 8-hour, time-weighted average  
ACGIH / STEL : Short-term exposure limit  
CN OEL / PC-TWA : Permissible concentration - time weighted average  
CN OEL / PC-STEEL : Permissible concentration - short term exposure limit

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized Sys-

# SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519



## Standard Zircon

Version	Revision Date:	SDS Number:	Date of last issue: 2024/10/17
3.0	2025/05/08	2874708-00014	Date of first issue: 2018/06/07

---

tem; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

### 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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CN / EN