

**Safety data sheet
according to UK REACH**

Printing date 05.01.2026

Version number 13.00 (replaces version 12.00)

Revision: 05.01.2026

*** SECTION 1: Identification of the substance/mixture and of the company/undertaking**
1.1 Product identifier

Trade name:

KRONOS Titanium dioxide

Product Codes

KRONOS 1000; KRONOS 1002; KRONOS 2044;
 KRONOS 2073; KRONOS 2078; KRONOS 2190
 KRONOS 2211; KRONOS 2220; KRONOS 2222;
 KRONOS 2230; KRONOS 2233; KRONOS 2350;
 KRONOS 2500; Type 3752;

**Downstream User Import
Notification (DUIN)**

submitted

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

White pigment for application in
 Coating materials, printing inks, man-made fibres, plastics, paper,
 glass, vitreous enamels, ceramic products

Manufacture of titanium metal

Uses advised against

None

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:

KRONOS INTERNATIONAL, Inc.
 Peschstrasse 5
 51373 Leverkusen, Germany
 Tel.: INT +49 214 356-0

EMERGENCY TELEPHONE
NUMBER:

KRONOS INTERNATIONAL, Inc. (Germany)
 Tel.: INT + 49 214 356-4444

*** SECTION 2: Hazards identification**
2.1 Classification of the substance or mixture
Classification according to
Regulation (EC) No 1272/2008

The product is not classified, according to the GB CLP regulation.

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

not applicable

Hazard pictograms

not applicable

Signal word

not applicable

Hazard statements

not applicable

2.3 Other hazards
**Results of PBT and vPvB
assessment**

The product does not fulfill the criteria for PBT and vPvB according to Annex XIII of UK REACH.

Determination of endocrine-disrupting properties

The product does not contain any substances above the legal limits that have endocrine disrupting properties according to UK REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605.

(Contd. on page 2)

GB

**Safety data sheet
according to UK REACH**

Printing date 05.01.2026

Version number 13.00 (replaces version 12.00)

Revision: 05.01.2026

Trade name: KRONOS Titanium dioxide

(Contd. of page 1)

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Dangerous components:	not applicable
Non-hazardous components	Titanium dioxide CAS number: 13463-67-7 EC number: 236-675-5 UK REACH Registration number: 01-2119489379-17-xxxx
Additional information:	Pigmentary titanium dioxide (not a nanomaterial according to European Commission Recommendation 2022/C 229/01)

SECTION 4: First aid measures**4.1 Description of first aid measures**

General information:	No special measures required.
After inhalation:	Supply fresh air; consult doctor in case of symptoms.
After skin contact:	Wash with water and soap and rinse thoroughly.
After eye contact:	Rinse opened eye for several minutes under running water. In case of persistent symptoms consult physician.
After swallowing:	No special measures required.
4.2 Most important symptoms and effects, both acute and delayed	No further relevant information available.
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 agents:** Use fire fighting measures that suit the environment. The product is not flammable.**5.2 Special hazards arising from the substance or mixture**

None

5.3 Advice for firefighters**Protective equipment:** Use protective measures that suit the hazard conditions.

(Contd. on page 3)

GB

**Safety data sheet
according to UK REACH**

Printing date 05.01.2026

Version number 13.00 (replaces version 12.00)

Revision: 05.01.2026

Trade name: KRONOS Titanium dioxide

(Contd. of page 2)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required

6.2 Environmental precautions: No special measures required.

6.3 Methods and material for containment and cleaning up: Collect mechanically.
Avoid causing dust.

6.4 Reference to other sections See Section 8 for information on personal protective equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Provide vacuum dust collection if dust is formed.

Information about protection against explosions and fires: The product is not flammable.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility: Not required

Further information about storage conditions: Store under dry conditions.

7.3 Specific end use(s) There are no further specific end uses than those named in section 1.2.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

Components with critical values that require monitoring at the workplace:

CAS: 13463-67-7 titanium dioxide

WEL Long-term value: 10* 4 mg/m³**

*total inhalable **respirable

8.2 Exposure controls

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

The usual precautionary measures should be adhered to in handling chemicals.

Titanium dioxide pigments are not irritants but as with all fine powders can absorb moisture and natural oil from the surface of the skin during prolonged exposure. Prolonged exposure should be

(Contd. on page 4)

GB

**Safety data sheet
according to UK REACH**

Printing date 05.01.2026

Version number 13.00 (replaces version 12.00)

Revision: 05.01.2026

Trade name: KRONOS Titanium dioxide

(Contd. of page 3)

avoided by wearing suitable protective gloves and clothing.

Breathing equipment: If workplace exposure limits are exceeded, use respiratory protection according to national regulations.

Hand protection Requirements according to EN 374
Check protective gloves prior to each use for their proper condition. Preventive skin protection by use of skin-protecting agents is recommended.

Material of gloves: The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. If the product is used in a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Eye/face protection Safety glasses

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state	Solid
Colour:	White
Smell:	Odourless
Odour threshold:	Not relevant
Melting point/freezing point:	>1800°C
Boiling point or initial boiling point and boiling range	Not relevant
Flammability	Product is not flammable.
Flash point:	Not applicable
Auto-ignition temperature:	Not applicable
pH (100 g/l) at 20°C	5.2 - 8.5
Viscosity:	Not applicable
Kinematic viscosity	Not applicable
Solubility in / Miscibility with	Not applicable
Partition coefficient n-octanol/water (log value)	Not applicable
Density and/or relative density	20°C Anatase 3,9 g/cm ³ Rutile 4,2 g/cm ³
Density:	500-900 kg/m ³
Apparent density at 20°C:	Not applicable
Vapour density	

9.2 Other information

Appearance:	Powder
Form:	
Important information on protection of health and environment, and on safety.	
Self-flammability:	Not applicable

(Contd. on page 5)

GB

**Safety data sheet
according to UK REACH**

Printing date 05.01.2026

Version number 13.00 (replaces version 12.00)

Revision: 05.01.2026

Trade name: KRONOS Titanium dioxide

(Contd. of page 4)

Explosive properties: Product is not explosive.
Evaporation rate: Not applicable.

Information with regard to physical hazard classes not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity	The substance is stable under normal use conditions.
10.2 Chemical stability Thermal decomposition / Conditions to be avoided:	No decomposition under normal use conditions
10.3 Possibility of hazardous reactions	No dangerous reactions known
10.4 Conditions to avoid	No further data; see Section 7
10.5 Incompatible materials:	No further data; see Section 7
10.6 Hazardous decomposition products:	No dangerous decomposition products known

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.
LD/LC50 values that are relevant for classification:

CAS: 13463-67-7 titanium dioxide

Oral LD50 > 5,000 mg/kg (rat) (OECD 425)

Dermal LD50 > 5,000 mg/kg (rabbit)

Inhalative LC50/4h > 6.8 mg/l (rat)

Primary irritant effect:

Skin corrosion/irritation OECD 404:
No irritant effect

Serious eye damage/irritation OECD 405:
No irritant effect
Like any foreign body, particles (dust) can cause mechanical irritation.

Respiratory or skin sensitisation OECD 406, OECD 429

No sensitizing effects.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

(Contd. on page 6)

GB

**Safety data sheet
according to UK REACH**

Printing date 05.01.2026

Version number 13.00 (replaces version 12.00)

Revision: 05.01.2026

Trade name: KRONOS Titanium dioxide

(Contd. of page 6)

Toxicity to sediment organisms

CAS: 13463-67-7 titanium dioxide

NOEC ≥ 100,000 mg/kg dw (Hyalella azteca)
(semi-static, ASTM 1706)**12.2 Persistence and degradability**

Not relevant for inorganic substances.

12.3 Bioaccumulative potential

Does not accumulate in organisms

12.4 Mobility in soil

The substance is immobile in soil.

12.5 Results of PBT and vPvB assessment

PBT:

The product does not fulfill the criteria for PBT and vPvB according to Annex XIII of UK REACH.

vPvB:

The product does not fulfill the criteria for PBT and vPvB according to Annex XIII of UK REACH.

12.6 Endocrine disrupting properties

The product does not contain any substances above the legal limits that have endocrine disrupting properties according to UK REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605.

12.7 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

European waste catalogue

Waste code number according to origin of waste

Uncleaned packagings:

Recommendation:

Disposal according to official regulations

SECTION 14: Transport information**14.1 UN number or ID number**

ADR/RID/ADN, ADN, IMDG, IATA

not applicable

14.2 UN proper shipping name

ADR/RID/ADN, ADN, IMDG, IATA

not applicable

14.3 Transport hazard class(es)

ADR/RID/ADN, ADN, IMDG, IATA

not applicable

Class

14.4 Packing group

ADR/RID/ADN, IMDG, IATA

not applicable

14.5 Environmental hazards

Not an environmentally hazardous substance

14.6 Special precautions for user

Not applicable

(Contd. on page 8)

GB

Safety data sheet according to UK REACH

Printing date 05.01.2026

Version number 13.00 (replaces version 12.00)

Revision: 05.01.2026

Trade name: KRONOS Titanium dioxide

(Contd. of page 7)

14.7 Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Limitation of use None

15.2 Chemical Safety Assessment

13.2 Chemical Safety Assessment Substances of very high concern (SVHC) according to REACH, Article 57

The product is not listed as SVHC, it does not contain any substances of very high concern.

Chemical safety assessment: A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information pertains solely to the identified product and includes our reliance on regulations in effect and information from third parties as of the date hereof. It remains the sole responsibility of the customer to determine the suitability of the product when used in specific processes and applications or combined with other materials and to ensure compliance with all relevant laws, regulations, and standards governing those uses. The provision of this information does not constitute a warranty, guarantee, or representation of any kind. No contractual obligations, either express or implied, are created between KRONOS and any recipient of this information.

Department issuing data sheet: Global Quality Management

Contact: **KRONOS INTERNATIONAL, Inc.**
Tel.: INT + 49 214 356-0
e-mail: productstewardship@kronosww.com

Abbreviations and acronyms:	RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative
------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Sources UK REACH-Registration Dossier

* Data compared to the previous version altered.

Amended according to Regulation (EU) no 2020/878