



# SAFETY DATA SHEET

This SDS complies with the requirements of JIS Z 7253:2019 (Japan)

Issuing Date 12-Nov-2019

Revision date 20-May-2022

Revision Number 4

## 1. Identification

**Product Name** TiONA® 595, TiONA® 696, TiONA® 813 / CR-813, TiONA® 822 / CR-822, TiONA® 826 / CR-826, TiONA® 828 / CR-828, TiONA® 834 / CR-834, TiONA® 880 / CR-880, TiONA® 8140 / 8140, TiONA® 41J / 41J, TiONA® 828E / CR-828E.

**CAS No.** 13463-67-7

**Registration Number(s)** No information available

### Details of the supplier of the safety data sheet

#### **Supplier**

Tronox Pigment Bunbury Ltd.  
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WA 6233  
TEL: (08) 9780-8333  
FAX: (08) 9780-8500

**Emergency telephone number** 24 Hour Emergency Phone Number  
CHEMTREC (Japan): 81-345209637  
CHEMTREC (International): +1 703 741 5970

**E-mail address** chemprodsteward@tronox.com

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

**Recommended use** Pigment

**Restrictions on use** For industrial use only

## 2. Hazard(s) identification

### GHS Classification

Not classified

### Label elements

#### **Hazard statements**

Not classified

### Other hazards

None known.

### 3. Composition/information on ingredients

Pure substance/mixture Mixture

CAS No. 13463-67-7

Chemical name	CAS No	Weight-%	ENCS Inventory	ENCS Number	ISHL Inventory	ISHL No
Titanium dioxide	13463-67-7	> 80	Existing	(1)-558,(5)-5225	Existing	(5)-5225,(1)-558
Trimethylolpropane (TMP)	77-99-6	< 0.45	Existing	(2)-245	Existing	(2)-245

This product contains  $\geq 0.1$  -  $< 3.0\%$  of substance (s) that are classified for Reproductive toxicity Category 2.

Impurities and/or Stabilizing Additives which Contribute to the Classification Not applicable.

Pollutant Release and Transfer Register (PRTR)

Not applicable

Industrial Safety and Health Law

ISHL Notifiable Substances

Not applicable

Harmful Substances Whose Names Are to be Indicated on the Label

Not applicable

Poisonous and Deleterious Substances Control Law

Not applicable

### 4. First-aid measures

In case of inhalation	Remove to fresh air.
In case of skin contact	Wash skin with soap and water.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
In case of ingestion	Clean mouth with water.
Most important symptoms/effects, acute and delayed	Inhalation of dust in high concentration may cause irritation of respiratory system.
Self-protection of the first aider	Use personal protective equipment as required.
Note to physicians	Treat symptomatically.

### 5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

<b>Specific hazards arising from the chemical</b>	Avoid generation of dust.
<b>Hazardous combustion products</b>	Non-combustible.
<b>Flammable properties</b>	Not applicable.
<b>Explosive properties</b>	Not an explosive.
<b>Special protective equipment and precautions for fire-fighters</b>	Protective equipment and precautions for firefighters.
<b>Other information</b>	CAUTION: Use of water spray when fighting fire may be inefficient.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid generation of dust. Use personal protective equipment as required.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Take up mechanically, placing in appropriate containers for disposal.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.
<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.

## 7. Handling and storage

### Handling

<b>Local and General Ventilation</b>	Use with local exhaust ventilation.
<b>Advice on safe handling</b>	Use according to package label instructions.
<b>Prevents Handling of Incompatible Substances or Mixtures</b>	See section 10 for more information.
<b>Hygiene Measures</b>	Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and after work. Take off contaminated clothing and wash before reuse.

### Storage

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.
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## 8. Exposure controls/personal protection

### Exposure guidelines

Chemical name	Japan Society of Occupational Health	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	ACGIH TLV
Titanium dioxide 13463-67-7	TWA: 0.3 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>

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

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems

**Environmental exposure controls** Prevent product from entering drains.

### Personal protective equipment

**Respiratory protection** None under normal use conditions. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hand protection** Wear suitable gloves. Wash face, hands and any exposed skin thoroughly after handling.

**Eye/face protection** Safety glasses with side shields are recommended for medical or industrial exposures.

**Skin and body protection** No special protective equipment required.

**Thermal hazards** None under normal processing.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Powder
<b>Physical state</b>	Solid
<b>Color</b>	white
<b>Odor</b>	None
<b>Odor threshold</b>	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>	1830 °C / 3326 °F	
<b>Boiling point / boiling range</b>	2972 °C / 5381.6 °F	
<b>Flammability (solid, gas)</b>		Not flammable
<b>Upper/lower flammability or explosive limits</b>		Not applicable
<b>Upper flammability or explosive limits</b>		
<b>Lower flammability or explosive limits</b>		
<b>Flash point</b>		Not applicable
<b>Evaporation rate</b>		Not applicable
<b>Autoignition temperature</b>		Not applicable
<b>Decomposition temperature</b>		Not applicable
<b>pH</b>	6-9	10g/100ml aqueous solution
<b>Viscosity</b>		
<b>Kinematic viscosity</b>		Not applicable

Dynamic viscosity		Not applicable
Water solubility	Insoluble in water	
Solubility(ies)	Insoluble in common solvents	
Partition Coefficient (n-octanol/water)		No data available
Vapor pressure		Not applicable
Density and/or relative density		
Relative density	3.7-4.1	(water = 1)
Liquid Density		Not applicable
Bulk density	0.4 - 0.8 g/cm3	
Vapor density		Not applicable
Particle characteristics		
Particle Size		Not applicable
Particle Size Distribution		Not applicable
<b>Other information</b>		
Explosive properties	Not an explosive	
Oxidizing properties	None known	
VOC Content (%)	None 0%	

## 10. Stability and reactivity

Reactivity	Stable.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	dust formation.
Incompatible materials	None known.
Hazardous decomposition products	None known.
Hazardous polymerization	None under normal processing.
Explosion data	
Sensitivity to static discharge	None.
Sensitivity to mechanical impact	None.

## 11. Toxicological information

### Acute toxicity

Classification not applicable.

### Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide	> 5000 mg/kg ( Rat )	-	> 6,82 mg/L ( Rat ) 4 h
Trimethylolpropane (TMP)	= 14100 mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	> 0.85 mg/L ( Rat ) 4 h

Abbreviations and acronyms

Rat: Rat

Rabbit: Rabbit

Symptoms	Inhalation of dust in high concentration may cause irritation of respiratory system.
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## Product Information

<b>Ingestion</b>	Not an expected route of exposure.
<b>Inhalation</b>	Inhalation of dust in high concentration may cause irritation of respiratory system.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking.
<b>Eye contact</b>	Inert foreign body hazard only.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.

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

Chemical name	Japan	IARC
Titanium dioxide 13463-67-7	2	Group 2B

### Legend

**IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Developmental toxicity</b>	Based on available data, the classification criteria are not met.
<b>Teratogenicity</b>	None known.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Not applicable.
<b>Other adverse effects</b>	None known.

## 12. Ecological information

**Ecotoxicity** Not considered to be harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Titanium dioxide	ErC50: >100 mg/l (72h, Pseudokirchneriella subcapitata)	LC50: >1000 mg/l (96h, Pimephales promelas)	-
Trimethylolpropane (TMP)	-	-	EC50: =13000mg/L (48h, Daphnia species) EC50: 10330 - 16360mg/L (48h, Daphnia magna)

**Persistence and degradability** Titanium Dioxide, is an inorganic metal oxide, therefore this does not apply.  
Trimethylolpropane is readily biodegradable and does not bioaccumulate.

**Bioaccumulation** None known.

#### Component Information

Chemical name	Partition coefficient
Trimethylolpropane (TMP) 77-99-6	-0.47

**Mobility in soil** Not mobile.

**Hazardous to the ozone layer** Not classified.

**Other adverse effects** No information available.

### 13. Disposal considerations

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

**IMDG** Not regulated

**ADR** Not regulated

**IATA** Not regulated

**Japan** Not regulated

### 15. Regulatory information

#### National regulations

##### **Pollutant Release and Transfer Register (PRTR)**

Not applicable

##### **Industrial Safety and Health Law**

###### **Harmful Substances Prohibited for Manufacture**

Not applicable

###### **Harmful Substances Subject to Obtaining Permission for Manufacturing**

Not applicable

###### **Prevention of hazards due to specified chemical substances**

Not applicable

###### **ISHL Notifiable Substances**

Not applicable

##### **Poisonous and Deleterious Substances Control Law**

Not applicable

##### **High Pressure Gas Safety Act**

Not applicable

##### **Fire Service Law:**

Not applicable

**Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (CSCL)**

Not applicable

**Act on Prevention of Marine Pollution and Maritime Disaster**

Not applicable

**Chemical Weapons Prohibition Act**

Not applicable

**Water Pollution Control Act**

Not applicable

**Act on the Protection of the Ozone Layer Through the Control of Specified Substances and Other Measures** Not applicable

**International Regulations**

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

**Legend:**

TSCA	- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL	- Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	- Japan Existing and New Chemical Substances
IECSC	- China Inventory of Existing Chemical Substances
KECL	- Korean Existing and Evaluated Chemical Substances
PICCS	- Philippines Inventory of Chemicals and Chemical Substances
AICS	- Australian Inventory of Chemical Substances
NZIoC	- New Zealand Inventory of Chemicals

**16. Other information**

Prepared By	Product Stewardship
Issuing Date	12-Nov-2019
Revision date	20-May-2022
Revision Note	Format update.

**Other information** This product is not intended for consumption, cosmetic, pharmaceutical or medical end use. Tronox will not knowingly sell product for use into these applications.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

<u>Legend</u>	<u>Section 8: Exposure controls/personal protection</u>		
TWA	TWA (time-weighted average)	Ceiling	Maximum limit value
*	Skin designation	+	Sensitizers



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**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Chemicals Agency  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

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**End of Safety Data Sheet**