

**Safety Data Sheet  
according to HPR, Schedule 1**

Printing date 01/30/2023

Version 2.00

Reviewed on 01/24/2023

**1 Identification****Product identifier****Trade name:** KRONOS Rutile Paper 11**Relevant identified uses of the substance or mixture** Paper production  
Coated paper / paperboard**Details of the supplier of the safety data sheet****Manufacturer/Supplier:** KRONOS Canada Inc.  
3390, Marie-Victorin  
Varenes QC, J3X 1T4**Emergency telephone number:** +1-514-397-1550 for transportation emergencies only (Canada)  
+1-800-424-9300 (Chemtrec) for transportation emergencies only (U.S.)  
+1-800-866-5600 for other product information (8:00 am – 5:00 pm, central time U.S.)**2 Hazard identification****Classification of the substance or mixture**

The product is not classified, according to the Globally Harmonized System (GHS).

**Label elements****GHS label elements** Not applicable  
**Hazard pictograms** Not applicable  
**Signal word** Not applicable  
**Hazard statements** Not applicable**Other hazards** No further relevant information available.**3 Composition/Information on ingredients****Chemical characterization: Mixtures****Description:** Titanium dioxide pigment dispersed in water**Dangerous components:****CAS: 77-99-6** Trimethylolpropane (TMP) ≤ 0.32% w/w  
**EINECS: 201-074-9**  Toxic to Reproduction 2, H361**Additional information**

Certain manufacturers of TMP self-classified the substance as a category 2, suspected human reproductive toxicant (Repr. 2, H361 Suspected of damaging fertility or the unborn child), under the European Union's REACH regulation based on their interpretation of the results of an OECD 443 Extended One-Generation Reproduction Toxicity study in rats commissioned by those manufacturers. See Section 11 for additional information.

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**4 First-aid measures**
**Description of first aid measures**

<b>General information</b>	Remove any clothing soiled by the product.
<b>After inhalation</b>	Supply fresh air; consult doctor in case of complaints.
<b>After skin contact</b>	Wash with water and soap and rinse thoroughly.
<b>After eye contact</b>	Rinse opened eye for several minutes under running water. If irritation occurs consult physician.
<b>After swallowing</b>	Rinse out mouth and then drink plenty of water. If symptoms occur consult physician.
<b>Most important symptoms and effects, both acute and delayed</b>	No further relevant information available.
<b>Indication of any immediate medical attention and special treatment needed</b>	No further relevant information available.

**5 Fire-fighting measures**

<b>Extinguishing media</b>	
<b>Suitable extinguishing agents</b>	Use fire fighting measures that suit the environment. The product is not flammable.
<b>Special hazards arising from the substance or mixture</b>	None
<b>Advice for firefighters</b>	
<b>Protective equipment:</b>	Use protective measures that suit the hazard conditions.

**6 Accidental release measures**

<b>Personal precautions, protective equipment and emergency procedures</b>	Not required.
<b>Environmental precautions:</b>	Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil.
<b>Methods and material for containment and cleaning up:</b>	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to section 13.
<b>Reference to other sections</b>	See Section 7 for information on safe handling See Section 8 for information on personal protective equipment.

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See Section 13 for disposal information.

**7 Handling and storage**
**Handling**
**Precautions for safe handling** No special measures required.

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

**Conditions for safe storage, including any incompatibilities**
**Requirements to be met by storerooms and receptacles:** Recommended storage temperature >32°F / >0°C

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** None

**8 Exposure controls/ Personal protection**
**Additional information about design of technical systems:** No further data; see Section 7.

**Control parameters**
**Components with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Exposure controls**
**Personal protective equipment**
**General protective and hygienic measures** The usual precautionary measures for handling chemicals should be followed.  
 Store protective clothing separately.

**Breathing equipment:** Use breathing protection when aerosol or mist is formed.  
 The respirator must be selected by a technically qualified individual.

**Protection of hands:** Use gloves appropriate for work conditions to minimize prolonged skin contact and potential skin absorption of TMP and prevent drying and subsequent irritation of skin.  
 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 depends on the type of job, the characteristics of all substances to be handled and on further marks of quality, which may vary from manufacturer to manufacturer. If the product is used in a preparation of several

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substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

**Eye protection:** Safety glasses

**Body protection:** Wear long-sleeved protective work clothing.

**9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Liquid
<b>Color:</b>	White
<b>Odor:</b>	Weak, characteristic
<b>Odor threshold:</b>	Not determined.

**pH-value:** 7.5 - 8.5

**Melting point/Melting range:** Not determined

**Boiling point/Boiling range:** Not determined

**Flash point:** Not applicable

**Ignition temperature:** Not applicable

**Decomposition temperature:** Not applicable

**Auto igniting:** Product is not selfigniting.

**Danger of explosion:** Product is not explosive.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

**Vapor pressure:** Not determined.

**Density at 20°C:** 2.341 - 2.385 g/cm<sup>3</sup>

**Relative density** Not determined.

**Evaporation rate** Not determined.

**Solubility in / Miscibility with**

**Water:** Fully miscible

**Partition coefficient (n-octanol/water):** Not applicable

**Viscosity:**

**dynamic at 20°C:** ≤ 800 mPas (Brookfield, 100 rpm)

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**Solvent content:****Solids content:** 76.0 - 77.0 %**Other information**

No further relevant information available.

**10 Stability and reactivity****Reactivity** The product is stable under normal use conditions.**Chemical stability****Thermal decomposition /  
conditions to be avoided:**

No decomposition under normal use conditions.

**Possibility of hazardous  
reactions**

No dangerous reactions known

**Conditions to avoid**

No further data; see Section 7.

**Incompatible materials:**

No further data; see Section 7.

**Hazardous decomposition  
products:**

No further data; see Section 5.

**11 Toxicological information****Information on toxicological effects****Acute toxicity:** Based on available data, the classification criteria are not met.  
**LD/LC50 values that are relevant for classification:**

Oral ATE &gt; 2,000 mg/kg

Dermal ATE &gt; 2,000 mg/kg

Inhalative ATE > 5 mg/m<sup>3</sup>**Primary irritant effect:**

on the skin:

No irritant effect

on the eye:

No irritant effect

**Sensitization:**

No sensitizing effects.

**Subacute to chronic toxicity:**

CAS: 13463-67-7 Titanium dioxide

Oral NOAEL 3,500 mg/kg/d (rat) (90 d)

Dermal NOAEL mg/kg/d  
no relevant data availableInhalative NOAEC 10 mg/m<sup>3</sup> (rat) (90 d)

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**CAS: 77-99-6 Trimethylolpropane (TMP)****Oral NOAEL 67 mg/kg (rat)  
subchronic 90-days study****Additional toxicological  
information:****Titanium Dioxide**

On February 18, 2020, the European Union (EU) published the delegated regulation classifying certain powder titanium dioxide (TiO<sub>2</sub>) as a suspected carcinogen (Category 2) via inhalation under EU Regulation No 1272/2008 on classification, labelling, and packing (CLP) of substances and mixtures. Classification requirements will come into force on October 1, 2021, mandating hazard labels be placed on certain TiO<sub>2</sub> powder products and certain powder mixtures containing TiO<sub>2</sub> sold into the EU market. This classification of TiO<sub>2</sub> is not based on new science but instead on older scientifically questioned animal test data. Other studies and extensive data, including separate epidemiologic studies of TiO<sub>2</sub> workers, have shown no TiO<sub>2</sub>-specific links to cancer. TiO<sub>2</sub> has been characterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation (not ingestion). It has not been characterized as a potential carcinogen by either NTP or OSHA.

**Trimethylolpropane (TMP)**

Certain manufacturers of TMP self-classified the substance as a Category 2, suspected human reproductive toxicant (Repr. 2, H361 Suspected of damaging fertility or the unborn child) under the European Union's (EU) REACH regulation based on their interpretation of the results of an OECD 443 Extended One-Generation Reproduction Toxicity study in rats commissioned by those manufacturers. Taking into consideration the data from the study, the group also determined a new EU Derived No Effect Level (DNEL) for workers of 0.94 mg/kg/d (systemic, long-term, dermal route). TMP is contained in the specified TiO<sub>2</sub> products at less than 0.45 %. See Section 8 for recommended exposure control/personal protection.

**Carcinogenic categories****IARC (International Agency for Research on Cancer)****CAS: 13463-67-7 Titanium dioxide: 2B****NTP (National Toxicology Program)**

None of the ingredients is listed.

**12 Ecological information****Toxicity****Based on the composition it can be assumed that the mixture dose not pose any risk for the aquatic environment.****Persistence and degradability****No further relevant information available.**

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<b>Bioaccumulative potential</b>	<b>No further relevant information available.</b>
<b>Mobility in soil</b>	<b>The product is immobile in soil.</b>
<b>Other adverse effects</b>	<b>No further relevant information available.</b>

**13 Disposal considerations**

<b>Waste treatment methods Recommendation</b>	<b>Disposal must be made according to all federal, state, and local (municipal) regulations.</b>
<b>Uncleaned packagings: Recommendation:</b>	<b>Disposal must be made according to all federal, state, and local (municipal) regulations.</b>

**14 Transport information**

<b>UN-Number</b>	<b>Not applicable</b>
<b>DOT/TDG, ADR, ADN, IMDG, IATA</b>	<b>Not applicable</b>
<b>UN proper shipping name</b>	<b>Not applicable</b>
<b>ADR, ADN, IMDG, IATA</b>	<b>Not applicable</b>
<b>Transport hazard class(es)</b>	
<b>DOT, ADR, ADN, IMDG, IATA</b>	
<b>Class</b>	<b>Not applicable</b>
<b>Packing group</b>	
<b>DOT/TDG, ADR, IMDG, IATA</b>	<b>Not applicable</b>
<b>Environmental hazards:</b>	
<b>Marine pollutant:</b>	<b>No</b>
<b>Special precautions for user</b>	<b>None</b>
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	<b>Not applicable.</b>

**15 Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture** **No further relevant information available.**

**TSCA and Canada DSL Status:**

All components have the value ACTIVE.

**WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)  
EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Contact:** KRONOS Canada, Inc.  
Tel.: INT + 1 800 866 5600  
e-mail : SDS-NA@kronosww.com

**Date of the latest revision of the safety data sheet** 01/24/2023

**Abbreviations and acronyms:** ICAO: International Civil Aviation Organisation  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
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