Safety data sheet
according to 1907/2006/EC Art. 31, as amended by UK REACH Regulations SI 2019/758

Printing date 29.02.2024 Version number 3.00 (replaces version 2.00) Revision: 04.10.2022

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: **KRONOS 9900**
Digital White
Titanium dioxide pigment concentrate
EU REACH Registration number: **All components of the product are registered or exempt from registration.**
Downstream User Import Notification (DUIN) **Titanium dioxide, CAS 13463-67-7, submitted (2021); restrictions might apply to the product.**

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses of the substance or mixture **Production of coatings, printing inks, inks**
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

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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**

Additional information:
EUH208 Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.
EUH210 Safety data sheet available on request.

2.3 Other hazards **No further relevant information available.**
Results of PBT and vPvB assessment **The product does not fulfill the criteria for PBT and vPvB according to Annex XIII of UK REACH.**

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SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: **Titanium dioxide dispersed in water**

Dangerous components:

CAS: 55965-84-9 **reaction mass of: 5-chloro-2-methyl-4-isothiazolin-** **≥ 0.00025 - < 0.0015%**
Index number: 613-167-00-5 **3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)**
Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330
Skin Corr. 1C, H314; Eye Dam. 1, H318
Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100)
Skin Sens. 1A, H317
EUH071
Specific concentration limits:
Skin Corr. 1C; H314:C ≥ 0.6 %
Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 %
Eye Dam. 1; H318: C ≥ 0.6 %
Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 %
Skin Sens. 1A; H317: C ≥ 0.0015 %

SECTION 4: First aid measures

4.1 Description of first aid measures
General information: **No special measures required.**

After inhalation: **No relevant way of exposure.**

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: **Rinse out mouth and then drink plenty of water.**
In case of persistent symptoms consult physician.

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.**

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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 No further relevant information available.

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.

6.2 Environmental precautions: Do not allow to enter the ground/soil.
Do not allow product to reach sewage system or water bodies.

6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.

6.4 Reference to other sections No dangerous materials are released.
See Section 7 for information on safe handling
See Section 8 for information on personal protective equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling No special measures required.
Information about protection against explosions and fires: No special measures required.
The product is not flammable.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and containers: Prevent any penetration into the ground.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Protect from frost.

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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: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Not required.

8.2 Exposure controls
Appropriate engineering controls: No further data; see Section 7

Individual protection measures, such as personal protective equipment
General protective and hygienic measures: The usual precautionary measures should be adhered to in handling chemicals.
Avoid contact with the eyes and skin.

Breathing equipment: Not required.

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

Colour:	White
Smell:	Odourless
Odour threshold:	Not relevant

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Melting point/freezing point:	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flash point:	Not applicable
Auto-ignition temperature:	Not applicable
pH at 20°C	8.5 - 9.5
Viscosity:	
Kinematic viscosity	Not determined.
dynamic at 25°C:	< 300 mPas (Rheometer, 100 1/s)
Solubility in / Miscibility with	
Water:	Fully miscible
Partition coefficient n-octanol/water (log value)	Not applicable
Density and/or relative density	
Density at 20°C:	1.60 - 1.70 g/cm³
Vapour density	Not applicable.

9.2 Other information

Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Self-flammability:	Product is not selfigniting.
Explosive properties:	Product is not explosive.
Solvent content:	
Solids content:	52 - 56 %
Change in condition:	
Evaporation rate	Not determined.

Information with regard to physical hazard classes

Explosives	not applicable
Flammable gases	not applicable
Aerosols	not applicable
Oxidising gases	not applicable
Gases under pressure	not applicable
Flammable liquids	not applicable
Flammable solids	not applicable
Self-reactive substances and mixtures	not applicable
Pyrophoric liquids	not applicable
Pyrophoric solids	not applicable
Self-heating substances and mixtures	not applicable
Substances and mixtures, which emit flammable gases in contact with water	not applicable
Oxidising liquids	not applicable
Oxidising solids	not applicable
Organic peroxides	not applicable
Corrosive to metals	not applicable

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Desensitised explosives 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

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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)

CAS: 55965-84-9 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
Inhalative LC50/4h 0.31 mg/l (rat)

Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation The product is not classified as sensitizing but contains ingredients that may cause allergic reactions in previously sensitized individuals. See section 2.2
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.

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

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 available

Inhalative NOAEC 10 mg/m³ (rat) (90 d)

11.2 Information on other hazards

Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.

SECTION 12: Ecological information

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

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 product is immobile in soil.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6 Endocrine disrupting properties The product does not contain substances with endocrine disrupting properties.

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

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14.3 Transport hazard class(es)

ADR/RID/ADN, ADN, IMDG, IATA	
Class	**not applicable**
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**
14.7 Maritime transport in bulk according to IMO instruments	**Not applicable**

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 2012/18/EU	
Named dangerous substances - ANNEX I	**None of the ingredients is listed.**

15.2 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 not been carried out.**

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H301 Toxic if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

Department issuing data specification sheet: **Global Quality Management**

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Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

*** Data compared to the previous version altered.**

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