

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 27.08.2025

Version number 10.00 (replaces version 9.00)

Revision: 25.08.2025

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

1.1 Product identifier

Trade name: **KRONOS 4045**
 EU REACH Registration number: All components of the product are registered or exempt from registration.
 UFI: **3J10-9066-400X-R2HC**
 (AT, BE, DE, DK, ES, FR, IT, NL, LU, SE)

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

Identified uses of the substance or mixture
 Coated paper / paperboard
 Paper pulp
 Knife filler/ Surfacers
 Emulsion paint for interior use
 Road-marking paint

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



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements

Labelling according to
 Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07

Signal word

Warning

Hazard-determining components
 of labelling:

Hazard statements

2-methyl-2H-isothiazol-3-one

Precautionary statements

H317 May cause an allergic skin reaction.

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

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P280 Wear protective gloves / eye protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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 REACH.

Determination of endocrine-disrupting properties

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description:

Titanium dioxide dispersed in water

Dangerous components:

CAS: 2682-20-4	2-methyl-2H-isothiazol-3-one	≥ 0.0015 - < 0.025%
EINECS: 220-239-6	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330	
Index number: 613-326-00-9	Skin Corr. 1B, H314; Eye Dam. 1, H318	
	Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1)	
	Skin Sens. 1A, H317	
	EUH071	
	Specific concentration limit:	
	Skin Sens. 1A; H317: C ≥ 0.0015 %	
CAS: 2634-33-5	1,2-benzisothiazol-3(2H)-one	≥ 0.0015 - < 0.025%
EINECS: 220-120-9	Acute Tox. 2, H330	
Index number: 613-088-00-6	Eye Dam. 1, H318	
	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
	Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1A, H317	
	ATE: LD50 oral: 450 mg/kg	
	LC50/4h inhalable: 0.21 mg/l	
	Specific concentration limit:	
	Skin Sens. 1A; H317: C ≥ 0.036 %	

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Remove any clothing soiled by the product.

After inhalation:

Supply fresh air; consult doctor in case of symptoms.

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|----------------------------|---|
| After skin contact: | Wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor. |
| After eye contact: | Rinse opened eye for several minutes under running water.
Protect unharmed eye.
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.

SECTION 5: Firefighting measures
5.1 Extinguishing media
Suitable extinguishing agents: The product is not flammable.
Use fire fighting measures that suit the environment.

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

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Do not allow to enter drainage system, surface or ground water.
Do not allow to enter the ground/soil.

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

See Section 7 for information on safe handling
See Section 8 for information on personal protective equipment.
See Section 13 for information on disposal.

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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: Recommended storage temperature between 5°C and 32°C.

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

Further information about storage conditions: None

7.3 Specific end use(s) No further relevant information available.

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

Individual protection measures, such as personal protective equipment

General protective and hygienic measures: The usual precautionary measures should be adhered to in handling chemicals.

Breathing equipment: Use breathing protection only when aerosol or mist is formed.

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.

Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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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	Liquid
Colour:	White
Smell:	Odourless
Odour threshold:	Not applicable
Melting point/freezing point:	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flash point:	Not applicable
Decomposition temperature:	Not applicable
pH at 20°C	7.5 - 8.8
Viscosity:	
Kinematic viscosity dynamic at 20°C:	Not determined. <1000 mPas
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:	1.8 - 2.3 g/cm ³

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:

Water: ≤ 31 %

Solids content: ≥ 69 %

Change in condition:

Evaporation rate: Not determined.

Information with regard to physical hazard classes

not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available.

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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 relevant information available.

10.5 Incompatible materials:

No further relevant information available.

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:

The ATE (Acute Toxicity Estimate) of the mixture is calculated based on the formula proposed in chapter 3.1.6.1 of Regulation (EC) No 1272/2008.

Oral ATE >2000 mg/kg

Dermal ATE(mix) >2000 mg/kg

Inhalative ATE(mix) >5 mg/m³
Primary irritant effect:

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

May cause an allergic skin reaction.

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.

Aspiration hazard

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

11.2 Information on other hazards

Endocrine disrupting properties

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

* **SECTION 12: Ecological information**
12.1 Toxicity

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

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12.2 Persistence and degradability

Not relevant for inorganic substances.

12.3 Bioaccumulative potential

Accumulation of the product is not to be expected.

12.4 Mobility in soil

The product 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 REACH.

vPvB:

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

12.6 Endocrine disrupting properties

The product does not contain any substances above the legal limits that have endocrine disrupting properties according to 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

not applicable

ADN, IMDG, IATA

not applicable

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 applicable.

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

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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.

LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV): (Substances not listed)

None of the ingredients is listed.

REGULATION (EC) No 1907/2006

ANNEX XVII

Conditions of restriction: 3

Regulation (EU) No 649/2012

None of the ingredients is listed.

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

REGULATION (EU) 2024/590 on substances that deplete the ozone layer

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.
H302	Harmful if swallowed.
H311	Toxic 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.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.

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H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

Department issuing data sheet: Global Quality Management

Contact: KRONOS INTERNATIONAL, Inc.
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Date of previous version: 31.01.2024

Version number of previous version: 9.00

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
ATE: Acute toxicity estimate values
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – 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.

Amended according to Regulation (EU) no 2020/878

— EU —