

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 19.02.2021 WHITE PAPER

SDS NO : <u>081.01</u> Revision date : -

1) IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Form : Substance
Product Name : WHITE PAPER
CAS No : 13463-67-7
EC No : 236-675-5

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

Usage : It is used as a white pigment in coating materials, printing inks, handmade fiber

production, plastic, paper, glass, glass-enamel and ceramic products.

1.3. Details of the supplier of the safety data sheet

KDK KİMYA DERİ GIDA İNŞ.SAN.TİC.LTD.ŞTİ İDOSB DİLEK SOK NO:6 X10 ÖZEL PARSEL K:1 TUZLA/ İSTANBUL T 0216 394 00 54 info@kdkkimya.com - www.kdkkimya.com

1.4. Emergency telephone number: No additional information available

2) HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

Hazard classification and indication:

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: Not classified Signal words: Not classified

Hazard statements:

EUH210 Safety data sheet available on request.

Precautionary statements:

Contains: Titanium Dioxide

This product is not subject to hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage than 0,1%.



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3) COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

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Name	Product Identifier	%	1272/2008 (CLP)
Titanium dioxide	CAS No: 13463-67-7	100%	Not Classified
	EC No: 236-675-5	100%	Not Classified

Note: It is not classified as harmful unless it is in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm.

3.2. Mixtures

Not applicable

Full text of H-statements: see section 16

4) FIRST AID MEASURES

4.1. Description of first aid measures

Not specifically necessary. Observance of good industrial hygiene is recommended.

4.2. Most important symptoms and effects, both acute and delayed

No episodes of damage to health ascribable to the product have been reported.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

5) FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Equipment: The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

Unsuitable Extinguishing Equipment: None in particular.

5.2. Special hazards arising from the substance or mixture

Hazards Caused by Exposure in The Event of Fire Do not breathe combustion products.

5.3. Advice for firefighters

General Information

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations. Special Protective Equipment for Fire-Fighters

Normal firefighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).



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6) ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use breathing equipment if fumes or powders are released into the air. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7) HANDLING AND STORAGE

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use.

7.2. Conditions for safe storage, including any incompatibilities

Keep the product in clearly labelled containers. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

DNEL CAS No: 13463-67-7	
Inhalation (workers)	10 mg/m³ (local long-term effects)
DNEL CAS No: 13463-67-7	
Inhalation (professional user)	10 mg/m³ (local long-term effects)
DNEL CAS No: 13463-67-7	
Oral (consumer) 700mg/kg (systematic long-term effects)	
PNEC CAS No: 13463-67-7	
Marine water	0,0184 mg/l
Fresh water	O.184 mg/l
intermittent release	0.193 mg/l
PNEC CAS No: 13463-67-7	
Sewage Treatment Plants	100 mg/l



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PNEC CAS No: 13463-67-7	
Sediment/ Marine water	100 mg/kg
Sediment/ Fresh water	1000 mg/kg

PNEC CAS No: 13463-67-7	
Soil	100 mg/kg

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Hand Protection

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

Skin Protection

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Eye Protection

Wear airtight protective goggles (see standard EN 166).

Respiratory Protection

None required, unless indicated otherwise in the chemical risk assessment.

Environmental Exposure Controls

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

9) PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Solid, powder
Colour	White
Odour	Odourless
Odour threshold	Not available
pH (100g/l) 20°C	7
Melting point / freezing point	>1800 °C
Initial boiling point	Not available
Boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Non flammable
Lower inflammability limit	Not available
Upper inflammability limit	Not available



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Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Density (20°C)	Anatase: 3,9 g/cm ³
	Rutile: 4,2 g/cm ³
Apparent density (20°C)	500-900 kg/m³
Solubility	Insoluble
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Non-explosive
Oxidising properties	Not available

9.2. Other information

Information not available

10) STABILITY AND REACTIVITY

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However, the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

11) TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information Information not available

Information on likely routes of exposure Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure Information not available



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Interactive effects

Information not available

Acute Toxicity

Titanium dioxide (CAS No: 13463-67-7)	
Oral LD50	>5000 mg/kg (rat) – OECD425
Dermal LD50	>5000 mg/kg (rabbit)
Inhalation LC50	6.8 mg/l (rat)

Subacute Chronic Toxicity (CAS No: 13463-67-7	
Oral NOAEL	3500 mg/kg (rat) – 90d
Inhalation NOAEC	10mg/m³ (rat) – 90d

Skin Corrosion / Irritation

Does not meet the classification criteria for this hazard class

Serious Eye Damage / Irritation

Does not meet the classification criteria for this hazard class

Respiratory or Skin Sensitisation

Does not meet the classification criteria for this hazard class

Germ Cell Mutagenicity

Does not meet the classification criteria for this hazard class

Carcinogenicity

Does not meet the classification criteria for this hazard class

Reproductive Toxicity

Does not meet the classification criteria for this hazard class

Stot - Single Exposure

Does not meet the classification criteria for this hazard class

Stot - Repeated Exposure

Does not meet the classification criteria for this hazard class

Aspiration Hazard

Does not meet the classification criteria for this hazard class

12) ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Titanium dioxide (CAS No: 13463-67-7)	
LC50, Pimephales promelas	>1000 mg/l, (96h)
LC50, Cyprinodon variegatus	>10000 mg/l, (96h)
LC50, Daphnia magna	>1000 mg/l, (48h)
LC50, Acartia tonsa	>10000 mg/l, (48h)



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Titanium dioxide (CAS No: 13463-67-7)	
EC50, Pseudokirchneralla subcapitata	>100mg/l (72h)
EC50, Skeletonema costatum	>10000 mg/l (72h)
NOEC, Hyalella azteca	≥100000 mg/l (28d)
NOEC, Corophium volutator	≥14899 mg/kg (10d)

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage than 0,1%.

12.6. Other adverse effects

Information not available

13) DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Contaminated Packaging

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14) TRANSPORT INFORMATION

	Land transport ADR/RID	Marine transport IMDG	Air transport IATA-DGR
14.1 UN-No	The product is not classified as a dangerous good according to the regulations, regarding its transportation.		
14.2 Description of the goods	Not applicable	Not applicable	Not applicable
14.3 Transport hazard class(es)	Not applicable	Not applicable	Not applicable
14.4 Packaging group	Not applicable	Not applicable	Not applicable
14.5 Environmental hazards	Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No

14.6 Special precautions for user

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable



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15) REGULATORY INFORMATION

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

Seveso Category - Directive 2012/18/EC

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Substances subject to authorisation (Annex XIV REACH)

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012

Substances subject to the Rotterdam Convention

Substances subject to the Stockholm Convention

Healthcare control

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

16) OTHER INFORMATION

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative

Data sources: (EC) Regulation 1272/2008 (CLP). ECHA (European Chemicals Agency). Supplier's safety documents.



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Full text of H-statements

Not Classified

The information provided in this Safety Data Sheet is correct to the best of our knowledge, Information and belief at the date of its publication.

The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. It is the responsibility of persons in receipt of this Product Safety Data Sheet to ensure that the

information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces a formulation containing the product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from the Product Safety Data Sheet to their own Product Safety Data Sheet.

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS. As stated above, this Safety Data Sheet has been prepared in compliance with applicable European law. If you purchase this material outside Europe, where compliance laws may differ, you should receive from your local supplier a SDS applicable to the country in which the product is sold and intended to be used. Please note that the appearance and content of the SDS may vary —even for the same product between different countries, reflecting the different compliance requirements.