

. 02.2020 Rev Ω

Material safety data sheet According to EU Regulation 1907/2006 in the current version Titanium Paste

1. Identification of the substance/mixture and company

Trade name: Titanium dioxide Paste

Pigment dispersion of titanium dioxide in castor oil

INCI Ricinus communis seed oil, CI 77891, Polyhydroxystearic acid

CAS No.: 8001-79-4/ 13463-67-7/ 27924-99-8

EINESCS/EC No.: 232-293-8/ 236-675-5

REACH pre-registration No.:

Utilization: Raw material for cosmetic or professional use

Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania

Tel/Fax: +40259-436.755, www.elemental.eu

Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate

Publică București.

International emergency number: +49 180 2273-112

2. Hazards Identification

2.1 Classification of the substance or mixture

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2 Label elements

Special provisions according to Annex XVII of REACH and subsequent amendments None

2.3 Other hazards

Other Hazards: No other hazards

Hazards not otherwise classified identified during the classification process

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

No PBT Ingredients are present

3. Declaration of ingredients

3.1 Substances

Not Available

3.2 Mixtures

Mixture identification: Ricinus communis seed oil, CI 77891, Polyhydroxystearic acid

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
60-70 %	Titanium dioxide	CAS:13463-67-7 EC:236-675-5	-	01-2119489379-17-XXXX



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4. First aid measures

4.1 Description of first aid measures

In case of skin contact: Wash with plenty of water and disinfectant/non-abrasive soap.

In case of eye contact: Wash immediately with water.

In case of ingestion: Do not induce vomiting, get medical attention showing the MSDS and label hazardous.

In case of inhalation: Remove casualty to fresh air and keep warm and at rest.

 $4.2 \ \text{Most}$ important symptoms and effects, both acute and delayed

Not Available

5. Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water, CO2, foam, chemical powders, according to the materials involved in the fire. In case of fire, use foam, dry chemical, CO2.

Unsuitable extinguishing media: None in particular.

5.2 Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3 Advice for fire-fighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose of it following local legislation.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities if required.

Suitable material for taking up: dry and inert absorbing material (e.g. vermiculite, sand, earth).

6.3 Methods and material for containment and cleaning up



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Suitable material for taking up: dry and inert absorbing material (e.g. vermiculite, sand, earth). Wash with plenty of water.
6.4 Reference to other sections
See also section 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling:

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Store in a tightly closed container in a cool, dry, well-ventilated area.

Incompatible materials: None in particular.

Instructions as regards storage premises: Adequately ventilated premises.

7.3 Specific end use(s)

Recommendation(s)

Storage temperature < 25°C

Industrial sector specific solutions: None in particular.

8. Exposure controls / personal protection

8.1 Control parameters



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	OF1 T				Ch T	Ch T	B - b
Component	OEL Type	Country	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour
Titanium dioxide	ACGIH		10				
	NATIONAL	France	10				
	NATIONAL	Spain	10				
	NATIONAL	Portugal	10				
	NATIONAL	Belgium	10				
	NATIONAL	Poland	10.0				
	NATIONAL	Russian Federation	10				
	NATIONAL	United Kingdom	10		30		
	NATIONAL	United Kingdom	10		12		
	NATIONAL	United Kingdom	4		30		
	NATIONAL	Germany	3.000		6.000		
	NATIONAL	Germany	10.000		20.000		
	EU		10.000				
	NATIONAL	Austria	5.000				
	NATIONAL	Austria			10.000		
	NATIONAL	Bulgaria	10.000				
	NATIONAL	Croatia			4.000		
	NATIONAL	Croatia			10.000		
	NATIONAL	Denmark	6.000				
	NATIONAL	Estonia	5.000				
	NATIONAL	Finland	10.000				
	NATIONAL	Greece	10.000				
	NATIONAL	Greece	5.000				
	NATIONAL	Hungary	10.000				
	NATIONAL	Hungary	6.000				
	NATIONAL	Ireland	10.000				
	NATIONAL	Ireland	4.000				
	NATIONAL	Italy	10.000				
	NATIONAL	Latvia	10.000				
	NATIONAL	Lithuania	5.000				
	NATIONAL	Netherlands	10.000				
	NATIONAL	Netherlands	5.000				
	NATIONAL	Norway	5.000				
	NATIONAL	Romania	10.000		15.000		
	NATIONAL	Slovakia (Slovak Republic)	1.500				
	NATIONAL	Sweden	5.000				
	NATIONAL	Switzerland	3.000				
	NATIONAL	Spain	10				
	NATIONAL	Portugal	10				
	NATIONAL	Belgium	10				

Community Occupational Exposure Limits (OEL)



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NATIONAL 10.0 Poland ACGIH 10

Predicted	No	Effect	Concentration	(PNEC)	values

Plant	Ingredie	nt Comp	onent CA	AS-No.	PNEC LIMIT	Exposur Route		posure R equency	temark
NONE	SUBSC00	232 Titani dioxid		463-67-7	1.000 mg/l	Fresh Wa	ater		
					1000.000 mg/kg	Freshwat sediment	-		
					0.127 mg/l	Marine w	rater		
					100.000 mg/l	kg Marine w sediment			
					100.000 mg/l	kg Soil (agricult	ural)		
					100.000 mg/l	kg Microorg in sewag treatmen	e		
					1667.000 mg/kg	Food cha	in		
Derived	No Effect Level	(DNEL) val	ues						
Plant	Ingredient	Component	CAS-No.	Worker Industry	Worker Profession al	Consumer	Exposure Route	Exposure Frequency	Remark /
NONE	SUBSC0023	Titanium dioxide	13463-67-7	10.000	10.000 mg/m3		inhalative	Long Term, local effects	

700.000

Long Term, systemic

8.2 Exposure controls

Eye/face protection: Eye glasses with side protection.

Skin protection: Chemical protection clothing.

Hand protection: NBR (nitrile rubber).

Respiratory protection: Filtering Half-face mask (DIN EN 149).

Hygienic and Technical measures

Not Available

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State Liquid

Appearance: Paste or puree, White

Odour: Characteristic

Odour threshold: Not Available

pH: Not Available

Melting point/ range: Not Available Boiling point/range: Not Available Flash point: Not Applicable



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Evaporation rate: Not Available

Upper/lower flammability or explosive limits: Not Available

Vapour density: Not Available

Vapour pressure (20°C): Not Available

Density (20°C): Not Available Water solubility: Insoluble Lipid solubility: Fully miscible

Partition coefficient (n-octanol/water): Not Available

Auto-ignition temperature: Not Available Decomposition temperature: Not Available

Viscosity (20°C): Not Available Explosive properties: Not Available Oxidising properties: Not Available Flammability (Solid, Gas): Not Available

Volatile Organic compounds - VOCs = Not Available

9.2 Other information

Substance group relevant properties: Not Available

Miscibility: Not Available Conductivity: Not Available

10. Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Data not Available.

10.3 Possibility of hazardous reactions

Burning produces carbon monoxide and/or carbon dioxide.

10.4 Conditions to avoid

Stable under normal conditions of temperature and pressure.

10.5 Incompatible materials

Avoid strong oxidizing agents, peroxides, acids, alkali metals.

10.6 Hazardous decomposition products

Burning produces carbon monoxide and/or carbon dioxide.

11. Toxicological information

11.1 Information on toxicological effects

Toxicological Information of the Preparation



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a) respiratory or skin sensitisation Skin Sensitization Negative - Repeated Insult Patch Test (Marzulli & Maibach)

b) skin corrosion/irritation Skin Irritant No Irritant effect - (EpiDerm Test - Human Reconstructed Epidermis)

c) serious eye damage/irritation Eye Irritant Non irritating, minimal – (EpiOcular Tissue)

Toxicological information on main components of the mixture: Titanium dioxide a) acute toxicity LD50 Oral Rat > 10000.00000 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

12. Ecological information

12.1 Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-toxicity:

List of Eco-Toxicological properties of the components

Ecotox Data

60-70 % Titanium dioxide CAS: 13463-67-7 - EINECS: 236-675-5

a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss > 100.00000 mg/l 96h OECD 203 b) Aquatic acute toxicity: LC50 Fish Cyprinodon variegatus > 10000.00000 mg/l 96h OECD 203 c) Aquatic acute toxicity: LC50 Daphnia Daphnia magna > 100.00000 mg/l 48h OECD 202

12.2 Persistence and degradability

Not Available

12.3 Bioaccumulative potential Not Available

12.4 Mobility in soil

Not Available

12.5 Results of PBT and vPvB assessment



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No PBT Ingredients are present

12.6 Other adverse effects Not Available

13. Disposal considerations

13.1 Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. Transport information

14.1 UN number N/A

14.2 UN proper shipping name ADR-Shipping Name: N/A IATA-Technical name: N/A IMDG-Technical name: N/A

14.3 Transport hazard class(es)

ADR-Class: N/A IATA-Class: N/A IMDG-Class: N/A

14.4 Packing Group
ADR-Packing Group: N/A
IATA-Packing group: N/A
IMDG-Packing group: N/A

14.5 Environmental hazards Toxic Ingredients Qty: 0.00

High Toxicity Ingredients Qty: 0.00

Marine pollutant: No

Environmental Pollutant: No

14.6 Special Precautions for User

Road and Rail (ADR-RID):

ADR-Label: N/A

ADR-Upper number: N/A ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

Air (IATA):

IATA-Passenger Aircraft: N/A IATA-Cargo Aircraft: N/A

IATA-Label: N/A



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IATA-Sub Risk: N/A IATA-Erg: N/A

IATA-Special Provisioning: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A IMDG-Stowage Note: N/A IMDG-Sub Risk: N/A

IMDG-Special Provisioning: N/A

IMDG-Page: N/A IMDG-Label: N/A IMDG-EMS: N/A IMDG-MFAG: N/A

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

Not Available

15. Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2015/830 (Annex II)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None

Restrictions related to the substances contained: None

Provisions related to directive EU 2012/18 (Seveso III):

German Water Hazard Class.

Not Available

SVHC Substances:

Not Available



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15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for the mixture.

16. Additional information

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

16.1 Abbreviations

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

 ${\it INCI:}\ International\ Nomenclature\ of\ Cosmetic\ Ingredients.$

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.