

SAFETY DATA SHEET	Page 1 of 6
	Issued on November the 7 th , 2008
Trade name: SODIUM TITANATE	Revised on: November the 8 th , 2021
	Version: 8

1. Identification of the substance/mixture and of the company/undertaking				
1.1.	Product identifier (Product registration number, nanoform, UFI):	Sodium Titanate		
1.2.	Relevant identified uses of the substance/mixture and uses advised against:	Pigment production, PROC1 Use in closed process, no likelihood of exposure, ERC7 Industrial use of sub-stances in closed systems, PC19 Intermediate		
	identified uses	chemical product category	process categories - PROC	categories release into the environment-ERC
	Production of pigments	PC19	PROC1	ERC7
1.3.	Details of the supplier of the safety data sheet (manufacturer, importer, only representative, downstream user or distributor):			
1.3.1.	Supplier name:	CINKARNA CELJE, d.d.		
1.3.2.	Supplier address and phone:	Kidričeva 26, 3001 CELJE, SLOVENIJA, +386 3 427 60 00		
1.3.3.	E-Mail (competent person):	tatjana.rozman@cinkarna.si		
1.4.	Emergency phone number:	In case of health risk, consult your doctor. Additional information is available: During working hours from 7 a.m. to 3 p.m. +386 3 427 65 78 +386 3 427 60 00		

2. Hazards identification	
2.1.	Classification of substance or mixture: Regulation (EC) No 1272/2008 According to (EC) No. 1272/2008: Not classified
2.2.	Label elements: According to (EC) No. 1272/2008: Not classified
2.3.	Other hazards: none

3. Composition/information on ingredients						
3.1.	Substances/ mixture:					
/3.2.	Disodium titanate, Na ₂ TiO ₃ up to 17 % (as TiO ₂), water					
	Chemical name	CAS No. EC No. Index No.	REACH Registration No. Reference No.	% wt/vol/max. conc.	Classification according to Regulation (EC) No 1272/2008 (CLP)	SCL, M-factor, ATE
	Disodium titanate, Na ₂ TiO ₃ (as TiO ₂)	234-802-9 12034-34-3	01-2119560604- 40-0001	9 ut% – 17ut%	Not hazardous substance	Not hazardous substance

4. First aid measures	
4.1.	Description of first aid measures: Remove contaminated clothing and footwear. Inhalation: Remove victim to fresh air, give oxygen if breathing is difficult and seek medical

Cinkarna Celje, SAFETY DATA SHEET	Page 2 of 6
Trade name: SODIUM TITANATE	

		attention if symptom persist
	Skin contact:	Remove contaminated clothing, brush material off skin, wash affected area with water. Seek medical attention if symptoms persist.
	Eyes/mycosis contact:	Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.
	Ingestion:	Give 1-2 glasses of milk or water and induce vomiting. Seek medical attention if symptoms persist. Never induce vomiting or give anything by mouth to an unconscious person.
4.2	Most important symptoms and effects, acute and delayed:	Cause irritation.
4.3.	Indication of any immediate medical attention and special treatment needed:	In case of digestion, drink water and seek medical assistance.
5. Firefighting measures		
5.1.	Extinguishing media	Sodium Titanate is not flammable and non-explosive. Use suitable extinguishing agents for surrounding materials and type of fire.
	Appropriate media:	Sodium Titanate is not flammable and non-explosive. Use suitable extinguishing agents for surrounding materials and type of fire.
	Inappropriate media:	No data
5.2.	Specific hazards arising from the substance or mixture:	Fumes from fire are hazardous.
5.3.	Advice for firefighters:	Protective gloves, protective clothes or apron, watertight shoes or boots. Protective goggles or face shield. Use self – contained breathing apparatuses .
6. Accidental release measures		
6.1.	Personal precautions protective equipment and emergency procedures	Evacuate area. Wear protective clothing, footwear and face shield or goggles within the hazardous area.
6.1.1.	For non-emergency persons:	Remove unauthorized.
6.1.2.	For emergency responders:	See 8.2.2.
6.2.	Environmental precautions:	Prevent drainage into water beds and sewer ducts.
6.3.	Methods and material for containment and cleaning up:	
6.3.1.	Appropriate spillage retaining techniques (fencing, covering drains, retaining procedures):	Impoundment embankment
6.3.2.	Appropriate cleaning procedures	
	Neutralization techniques:	Neutralise with lime
	Decontamination techniques:	Vacuum up spill Sodium Titanate or neutralise with lime and then mechanically collect into designated and appropriately marked vessels /containers.
	Absorbent materials:	Lime
	Cleaning techniques:	Mechanically collect into designated and appropriately marked vessels /containers.
	Sucking techniques:	Procedure is possible. Collect into designated and appropriately marked vessels /containers.
	Required equipment for retaining /cleaning:	Shovels and suitable packaging.
6.3.3.	Inappropriate cleaning or retaining techniques:	Rinsing into water or earth, sewage or watercourse.
6.4.	Reference to other sections:	See 8.2.2.
7. Handling and storage		
7.1.	Precautions for safe handling	
7.1.1.	Recommendations shall be specified to:	No specific requirements. Use personal protective equipment.

Cinkarna Celje, SAFETY DATA SHEET	Page 3 of 6
Trade name: SODIUM TITANATE	

	Safe handling of substance or mixture:	Familiarize operators handling the Sodium Titanate with hazards, appropriate handling, personal protective equipment, and first aid measures in case of accidents, assistance, and environment protection.
	Prevent handling of incompatible substances or mixtures:	
	Operations and conditions which create new risks by altering the properties of the substance or mixture, and to appropriate countermeasure:	No data
	Reduce the release of the substance or mixture to the environment:	Storage floor must be made of acid resistant material.
7.1.2.	General working hygiene (prohibited eating, drinking and smoking within working area; washing hands ...):	No smoking inside storage area, no food and beverage. Washing hands.
7.2.	Conditions for safe storage, including any incompatibilities	Store in a tightly sealed container in cool, dry area.
	Management of risk associated with:	
	- explosive atmospheres:	Not required.
	- corrosive substances:	Not important
	- incompatible substances or mixtures:	Store away from oxidizers.
	- evaporation substances:	Not important
	- potential ignition sources:	Not important
	How to control the effects of	
	- weather conditions:	Not important
	- ambient pressure:	Not important
	- temperature:	Not under 0°C
	- sunlight:	Not important
	- humidity:	Not important
	Securing integrity of substance or mixture by use of:	
	- stabilisers:	Not important
	- antioxidants:	Not important
	Other advice including:	
	- ventilation requirements;	Not important
	- specific designs for storage rooms or vessels (including retention walls and ventilation):	Not important
	- quantity limitations regarding storage conditions:	Not important
	- packaging compatibility:	
7.3.	Specific end use(s):	See 1.2.
8. Exposure control/ personal protection		
8.1.	Control parameters	
8.1.1.	-Limit values (MV):	MV at workplace: 15 mg/m ³ TLV = 10 mg/m ³ (5 mg/m ³ resp.)
	-Limit values (BAT):	No data

Cinkarna Celje, SAFETY DATA SHEET	Page 4 of 6
Trade name: SODIUM TITANATE	

	DNEL:	Not data
	PNEC:	Not data
8.2.	Exposure control	See 5.,6.,7.,10.,11.,12. and 13. All must be permanently followed and controlled.
8.2.1.	Appropriate engineering controls:	
8.2.2.	Personal protective equipment:	Do not use damaged personal protective equipment.
	- respiratory protection:	Not needed during work. In case of fire see 5.3.
	- skin protection:	work clothes SIST EN ISO 13688, boots (SIST EN ISO 20345)
	- hand protection:	Acid-resistant gloves (SIST EN ISO 374-1), penetration time:> 60 minutes glove thickness: minimum 1.2 mm
	- eye/face protection:	Protective goggles that fit closely to the face, or face shield (SIST EN 166)
	- heat radiation protection:	Not important
	Other:	Not important
8.2.3.	Environment exposure control:	See 5.,6.,7.,10.,11.,12. and 13. All must be permanently followed and controlled.

9. Physical and chemical properties

9.1.	Information on basic physical and chemical properties:	
	- Physical state:	suspension
	- Color	white
	- odour:	odourless
	pH:	3,5 – 4,5
	Melting/freezing point:	Under 0°C
	Boiling point or initial boiling point and boiling range	105 – 110°C
	Flash point:	Not flammable
	Auto-ignition temperature:	Not flammable
	flammability (solid, gas):	Not flammable
	Lower and upper explosion limit:	Not flammable
	Vapor pressure:	Not flammable
	Density and/or relative density:	1100 g/L (25°C)
	Solubility:	Insoluble in water
	partition coefficient: n-octanol-water:	No data
	Decomposition temperature:	No data
	Kinematic viscosity:	App. 100 mPas
	Relative vapour density:	No data
9.2.	Other information:	none
9.2.1	Information on physical hazard classes	
	-Explosives:	
	- Flammable gases:	Not flammable

Cinkarna Celje, SAFETY DATA SHEET	Page 5 of 6
Trade name: SODIUM TITANATE	

	- Aerosols:	Not flammable
	- Oxidising gases:	Not flammable
	- Flammable liquids:	Not flammable
	- Flammable solids:	Not flammable
	- Corrosive to metals:	no
9.2.2	Other safety-related parameters:	none

10. Stability and reactivity

10.1.	Reactivity:	Non-reactive.
10.2.	Chemical stability:	Stable and non-reactive under normal conditions of use and transport.
10.3.	Possible hazardous reactions:	Not known
10.4.	Conditions to avoid:	Not known
10.5.	Incompatible materials:	Oxidizers -see 7.2.2.
10.6.	Hazardous decomposition products:	Na ₂ O

11. Toxicological data

11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008	
	- Acute toxicity:	acute toxicity (oral) >20000 mg / kg (rat)
	- Skin corrosion/irritation:	Not known
	- Serious eye damage/irritation:	Not known
	- Respiratory or skin sensitisation:	Not known
	- Germ cell mutagenicity:	Not mutagenic
	- Carcinogenicity:	Not carcinogen
	- Toxicity for reproduction:	Not known
	- STOT – single exposure:	Not known
	- STOT – repeated exposure:	Not known
	- Aspiration hazard:	Not known
	- Endocrine disrupting properties	Not known

12. Ecological information

12.1.	Toxicity:	not toxic
12.2.	Persistence and degradability:	Product is practically insoluble in water and conventional solvents
12.3.	Bioaccumulative potential:	Not known
12.4.	Mobility in soil:	Liquid – suspension, seep into the ground
12.5.	Results of PBT and vPvB assessment:	Not classified as PBT or VPvB
12.6.	Endocrine disrupting properties:	Not known
12.7.	Other adversative effects:	Not known

13. Disposal considerations

13.1.	Waste treatment methods:	Cleaning with water or incineration with appropriate equipment. Dispose of in accordance with local and national regulations.
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14. Transport information

Cinkarna Celje, SAFETY DATA SHEET	Page 6 of 6
Trade name: SODIUM TITANATE	

	ADR, RID, AND, IMDG, ICAO-TI/IATA-DGR	Product not classified as dangerous according to transport legislation.
14.1.	UN number or ID number:	Not required.
14.2.	UN proper shipping name:	Not required., not ADR
14.3	Transport hazard class(es):	Not required.
14.4.	Packaging group:	Not required.
14.5.	Environmental hazards:	Not required.
14.6.	Special precautions for user:	Not required.
14.7.	Maritime transport in bulk according to IMO instruments:	Not required.
15. Regulatory information		
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture:	Rules and regulations regarding classification, labelling, and packaging of hazardous substances and compounds. In accordance with the law on safety and health at work.
15.2.	Chemical safety assessment:	yes
16. Other information		
	Amendments made in the revised edition:	Safety data sheet is amended in all sections in order to harmonize with applicable legislation.
	List of relevant, hazard statements, safety phrases and/or precautionary statements. Write out the full text of any statement which are not written out in full under Sections 2 to 15:	See 2.2.
	in the case of mixtures, an indication of which of the methods of evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 was used for the purpose of classification:	calculation method
	Training of personnel:	In accordance with the law on safety and health at work.
	Key literature references and sources for data:	Safety data sheets Regulations REACH and CLP Registrant: CINKARNA CELJE, D.D. CELJE SLOVENIJA
	A key or legend to abbreviation and acronyms used in the safety data sheet:	PBT – persistent, bio accumulative and toxic vPvB – very persistent and very bio accumulative STOT – specific target organ toxicity DNEL – derived no effect levels PNEC – predicted no effect concentration ADR – European agreement concerning the international carriage of dangerous goods by road RID – International rule for transport of dangerous substances by railway ADN – European agreement concerning the International carriage of dangerous goods by inland waterways IMDG – International maritime dangerous goods code ICAO-TI – Technical instructions for the safe transport of dangerous goods by air IATA – International air transport association
Data specified above are based on research and experience of the supplier at the time of compiling the present MSDS. The supplier may not assume responsibility in case the buyer/user should fail to use the product in accordance with the relevant suggestions and recommendations. No information contained in the present SMDS may release the buyer/user from liability to strictly follow any legal requirements regarding his business activities.		