



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

1. Identification of the substance/mixture and of the company/undertaking

1.1.	Product identifier (Product registration number, nanoform, UFI):	Metatitanium acid (01-2119489379-17-001)	
1.2.	Relevant identified uses of the substance/mixture and uses advised against:	Colour pigments, catalysts, ceramics, electronics industry	
	identified uses	process categories - PROC	categories release into the environment-ERC
	production of ceramics	PROC 1	
	electronics industry	PROC 1	
	production of color pigments	PROC 1	
	production of catalysts	PROC 1	
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 Skin irritation, hazard category 2; H315 Eye irritation, hazard category 2; H319
2.2.	Label elements:	<p>Labelling in accordance with Regulation no. 1272/2008</p>  <p>Warning H315 Causes skin irritation. H319 Causes serious eye irritation. EUH 211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist P280 Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water.</p>

Cinkarna Celje, SAFETY DATA SHEET	Page 2 of 6
Trade name: METATITANIUM ACID	

		P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/container - neutralized and disposed of in accordance with national laws.
2.3.	Other hazards:	None

3. Composition/information on ingredients

3.1.	Substances/ mixture:				
/3.2	Mixture of hydrated titanium oxide $TiO_2 \times X H_2O$ (as TiO_2) up to 31 % , up to 4,9 % H_2SO_4 , 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
Hydrated titanium dioxide, $TiO_2 \times 2H_2O$	236-675-5 13463-67-7	01-2119489379-17- 0014	26 % – 31 % as TiO_2	Not hazardous substance	Not hazardous substance
Sulfuric Acid, H_2SO_4	7664-93-9 231-639-5 016-020-00-8	01-2119458838-20- 0082	1 ut % - 4,9 ut %	skin corr. 1A H314	Skin corr. 1A, H314:C>=15% Skin Irrit.2; H315:5%<=C<=15 %, Eye Irrit.2;H319:5%<=C <15%

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 attention if symptom persist.
	Skin contact:	Remove contaminated clothing, 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:	Rinse mouth with water and drink lots of water, do not incite vomiting, seek medical assistance.
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	
	Appropriate media:	Metatitanium Acid is not flammable and non-explosive. Use suitable extinguishing agents for surrounding materials and type of fire.
	Inappropriate media:	No data, not flammable suspension
5.2.	Specific hazards arising from the substance or mixture:	No data
5.3.	Advice for firefighters:	Protective gloves, protective clothes or apron, watertight shoes or boots. Protective goggles or face shield.

Cinkarna Celje, SAFETY DATA SHEET	Page 3 of 6
Trade name: METATITANIUM ACID	

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 Metatitanium Acid 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.
	Safe handling of substance or mixture:	Familiarize operators handling the Metatitanium Acid 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:	See 10.5.
	Operations and conditions which create new risks by altering the properties of the substance or mixture, and to appropriate countermeasure:	No special conditions, stabile suspension
	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. storage class 12 non-combustible products
	Management of risk associated with:	
	- explosive atmospheres:	Not important, the suspension is not explosive
	- corrosive substances:	Not important, slightly acidic suspension
	- incompatible substances or mixtures:	See 10.5.
	- evaporation substances:	Not important, the suspension is not reactive

Cinkarna Celje, SAFETY DATA SHEET	Page 4 of 6
Trade name: METATITANIUM ACID	

	- potential ignition sources:	Not important, the suspension not flammable
	How to control the effects of	
	- weather conditions:	Not important, stable suspension
	- ambient pressure:	Not important, stable suspension
	- temperature:	Not under 0 °C
	- sunlight:	Not important, stable suspension
	- humidity:	Not important, stable suspension
	Securing integrity of substance or mixture by use of:	
	- stabilizers:	Not important, stable suspension
	- antioxidants:	Not important, stable suspension
	Other advice including:	Not important, stable suspension
	- ventilation requirements;	Not important, stable suspension
	- specific designs for storage rooms or vessels (including retention walls and ventilation):	Not important, stable suspension
	- quantity limitations regarding storage conditions:	Not important, stable suspension
	- packaging compatibility:	Not important, stable suspension
7.3.	Specific end use(s):	See 1.2.

8. Exposure control/ personal protection		
8.1.	Control parameters	
8.1.1.	-Limit values (MV):	Sulfuric acid aerosol – air concentration MV at workplace: 0.05 mg/m ³
	-Limit values (BAT):	Not provided
	DNEL:	For sulfuric acid – 0.05 mg/m ³ (8 hours)
	PNEC:	Not provided
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:	stable suspension, personal equipment must always be in technically perfect condition and clean. Never use damaged equipment. Constant control is necessary
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:	Protective clothing - protection against the effects of liquid chemicals (type 3 or type 4) - SIST EN 14605. Protective clothing against chemical effects (type 6-limited protection against liquid chemicals) - SIST EN 13034. Safety shoes SIST EN ISO 20345 (S3) or footwear protection against chemicals - Laboratory SIST EN 13832-2 and protective boots SIST EN ISO 20345 (S5)
	- hand protection:	Gloves for chemical protection - SIST EN ISO 374-1 Short-circuiting the hand Suitable material: Nitrile rubber Glove material thickness: 0,12 mm Breakthrough time (maximum wear time):> 480 min. In case of frequent contact with hands. Suitable material: Nitrile rubber Glove material thickness: 0,38 mm Penetration time (maximum wear time):> 480 min
	- eye/face protection:	Protective glasses (SIST EN 166). face shield
	- heat radiation protection:	Not important, stable suspension

Cinkarna Celje, SAFETY DATA SHEET	Page 5 of 6
Trade name: METATITANIUM ACID	

	Other:	Not important, stable suspension
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:	Without
	pH:	> 2
	Melting/freezing point:	0 °C
	Boiling point or initial boiling point and boiling range	No data
	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:	1300 g/L (at 25 °C)
	Solubility:	Insoluble in water
	partition coefficient: n-octanol-water:	No data
	Decomposition temperature:	No data
	Kinematic viscosity:	App. 100 mPas (at 20 °C) Brookfield
	Relative vapour density:	No data
9.2.	Other information:	Concentration of present Sulfuric Acid: 1 % - 4,9 % by weight
9.2.1	Information on physical hazard classes	
	-Explosives:	
	- Flammable gases:	Not flammable
	- Aerosols:	Not flammable
	- Oxidising gases:	Not flammable
	- Flammable liquids:	Not flammable
	- Flammable solids:	Not flammable
	- Corrosive to metals:	slightly acidic suspension and corrosive to metals
9.2.2	Other safety-related parameters:	No data
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:	No data, stable suspension
10.4.	Conditions to avoid:	No data, stable suspension
10.5.	Incompatible materials:	alkali because a higher temperature is released

Cinkarna Celje, SAFETY DATA SHEET	Page 6 of 6
Trade name: METATITANIUM ACID	

10.6.	Hazardous decomposition products:	No data, stable suspension
11. Toxicological data		
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008	
	- Acute toxicity:	No data, the suspension is corrosive
	- Skin corrosion/irritation:	Skin irritation, the suspension is corrosive, hazard category 2
	- Serious eye damage/irritation:	Eye irritation, hazard category 2
	- Respiratory or skin sensitisation:	Can cause irritation
	- Germ cell mutagenicity:	Not mutagenic
	- Carcinogenicity:	Not carcinogen
	- Toxicity for reproduction:	No data, the suspension is corrosive
	- STOT – single exposure:	No data, the suspension is corrosive
	- STOT – repeated exposure:	No data, the suspension is corrosive
	- Aspiration hazard:	Can cause irritation
	- Endocrine disrupting properties	No data
12. Ecological information		
12.1.	Toxicity:	not known, the suspension is corrosive
12.2.	Persistence and degradability:	Product is practically insoluble in water (less than 1 %) and conventional solvents.
12.3.	Bioaccumulative potential:	No data, the suspension is corrosive
12.4.	Mobility in soil:	Liquid – suspension, seep into the ground, the suspension is corrosive
12.5.	Results of PBT and vPvB assessment:	Not classified as PBT or VPvB
12.6.	Endocrine disrupting properties:	No data
12.7.	Other adversative effects:	No data, the suspension is corrosive
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.
14. Transport information		
	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.

Cinkarna Celje, SAFETY DATA SHEET	Page 7 of 6
Trade name: METATITANIUM ACID	

		Regulation CLP and regulation REACH 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:	by calculation methods
	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.