CI TCI EUROPE N.V.

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revi	sion number: 1	Re	vision date: 7	10/03/2018
SECTION 1: Identification of the su	bstance/mixture and of the cor	npany/undertaking		
1.1 Product identifiers				
Product name:	Orotic Acid Monohydrate			
Product code:	O0065			
I.2 Relevant identified uses of the subs Identified uses:	tance or mixture and uses advised Reagents.	against		
.3 Details of the supplier of the safety	data sheet			
Supplier:				
TCI EUROPE N.V.				
Boerenveldseweg 6 Haven 1063				
B-2070 Zwijndrecht				
Telephone: +32(0)3 735 07 00				
E-mail: sales-eu@tcichemicals	com			
.4 Emergency telephone number:	+32(0)70 245 245			
SECTION 2: Hazards identification				
.1 Classification of the substance or n				
Acute toxicity (Oral)	Categ			
Skin corrosion/irritation	Categ	•		
Serious eye damage/eye irritation	Categ	ory 2		
Pictograms or hazard symbols				
Signal word	Warning			
Hazard statements	H302-Harmful if swallowed.			
	H315-Causes skin irritation.			
	H319-Causes serious eye irritation.			
Precautionary statements	P270-Do not eat, drink or smoke wi			
	P264-Wash hands and face thoroug			
	P280-Wear protective gloves, eye p	D: Call a POISON CENTER or doctor if you		linco
	mouth.	D. Call a POISON CENTER OF doctor if you	ieei uiiweii. K	11150
		64-IF ON SKIN: Wash with plenty of water.	If skin irritatio	n occurs:
	Get medical advice or attention. Ta	ke off contaminated clothing and wash it be	fore reuse.	
	P305+P351+P338+P337+P313-IF	N EYES: Rinse cautiously with water for se	everal minutes	. Remove
	contact lenses, if present and easy	to do. Continue rinsing. If eye irritation pers	ists: Get medi	cal advice
	or attention.			
.3 Other hazards				
Results of PBT and vPvB assessmer				
PBT:	Not applicable			
vPvB:	Not applicable			
SECTION 3: Composition/informat	ion on ingredients			
.1 Substances				
Components:	Orotic Acid Monohydrate			
Percent:	>98.0%(HPLC)(T)			
CAS RN:	50887-69-9		D40 M	lasts.
Synonyms:		cil-6-carboxylic Acid Monohydrate, Vitamin	B13 Monohyo	arate
Chemical Formula:	C5H4N2O4 · H2O			
00065	Orotic Acid Monohyc	Irate	F	Page 1 of 5

SECTION 4: First aid measures		
4.1 Description of first aid measures		
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.	
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
Eye contact:		
Ingestion:	Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.	
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.	
4.2 Most important symptoms and effec No data available	ts, both acute and delayed	
4.3 Indication of any immediate medical No data available	attention and special treatment needed	
SECTION 5: Firefighting measures 5.1 Extinguishing media		
Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.	
5.2 Special hazards arising from the substance or mixture	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)	
5.3 Advice for firefighters	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so. When extinguishing fire, be sure to wear personal protective equipment	
SECTION 6: Accidental release mea		
6.1 Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc	
6.2 Environmental precautions	Prevent product from entering drains	
6.3 Methods and materials for containment and cleaning up	Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.	
6.4 Reference to other sections	For disposal see section 13.	
SECTION 7: Handling and storage		
7.1 Precautions for safe handling	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a local exhaust if dust or aerosol will be generated. Avoid contact with skin, eyes and clothing.	
7.2 Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents.	
7.3 Specific end use(s)	No further relevant information available.	
SECTION 8: Exposure controls/pers	sonal protection	
8.1 Control parameters	No data available	
8.2 Exposure controls	Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.	
Respiratory protection: Hand protection: Eye protection: Skin and body protection:	Dust respirator. Follow local and national regulations. Protective gloves. Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires.	

SECTION 9: Physical and chemical properties

9.1 Information on basic	physical and o	chemical properties
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9.1 Information on basic physical and chemical properties		
Physical state (20°C):	Solid	
Form:	Crystal - Powder	
Colour:	White	
Odour:	No data available	
pH:	No data available	
Melting point/freezing point:	No data available	
Boiling point/range:	No data available	
Flash point:	No data available	
Evaporation rate(Butyl Acetate=1):	No data available	
Flammability(solid, gas):	No data available	
Flammability or explosive limits:		
Lower:	No data available	
Upper:	No data available	
Vapour pressure:	No data available.	
Vapour density:	No data available	
Relative density:	No data available	
Solubility(ies):		
[Water]	No data available	
[Other solvents]	No data available	
Partition coefficient:	No data available	
n-octanol/water:		
Autoignition temperature:	No data available	
Decomposition temperature:	No data available	
Dynamic Viscosity:	No data available	
Kinematic viscosity:	No data available	
9.2 Other safety information	No data available	

SECTION 10: Stability and reactivity		
10.1 Reactivity	No data available	
10.2 Chemical stability	Stable under proper conditions.	
10.3 Possibility of hazardous reactions	No special reactivity has been reported.	
10.4 Conditions to avoid	No data available	
10.5 Incompatible materials	Oxidizing agents	

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

SECTION 11: Toxicological informa	ation
11.1 Information on toxicological effect	S
Acute Toxicity:	orl-mus LD50:2000 mg/kg
	ipr-mus LD50:841 mg/kg
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	No data available
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available
RTECS Number:	RM3180000

SECTION 12: Ecological information 12.1 Toxicity Fish: No data available Crustacea: No data available Algae: No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil Log Pow: No data available Soil adsorption (Koc): No data available Henry's Law (PaM ³/mol): No data available	
Fish: No data available Crustacea: No data available Algae: No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil Use available Log Pow: No data available Soil adsorption (Koc): No data available	
Crustacea: No data available Algae: No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil Log Pow: Log Pow: No data available Soil adsorption (Koc): No data available	
Algae: No data available 12.2 Persistence and degradability No data available 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil Justice Log Pow: No data available Soil adsorption (Koc): No data available	
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12.4 Mobility in soil Log Pow: No data available Soil adsorption (Koc): No data available	
Log Pow: No data available Soil adsorption (Koc): No data available	
Soil adsorption (Koc): No data available	
Henry's Law (PaM ³ /mol): No data available	
12.5 Results of PBT and vPvB assessment	
PBT: Not applicable	
vPvB: Not applicable	
12.6 Other adverse effects No data available	
SECTION 13: Disposal considerations	
13.1 Waste treatment methods	
Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustib and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulation disposing of the substance.	
SECTION 14: Transport information	
14.1 UN number Not listed	
14.2 UN proper shipping name	
ADR/RID Not listed	
IMDG/IMO Not listed	
ICAO/IATA Not listed	
14.3 Transport hazard class(es)	
ADR/RID Does not correspond to the classification standard of the United Nations	
IMDG/IMO Does not correspond to the classification standard of the United Nations	
ICAO/IATA Does not correspond to the classification standard of the United Nations	
14.4 Packaging group	
14.4 Packaging group ADR/RID	

14.5 Environmental hazards	
Marine pollutant	-

14.6 Special precautions for user No data available

SECTION 15: Regulatory information

 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Substance of Very High Concern (SVHC) according to the Not listed REACH Regulations (EC) No.1907/2006

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information	
Prepared by:	TCI EUROPE N.V.
Issue date:	10/03/2018

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.

End of Safety Data Sheet