TCI EUROPE N.V.

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## SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Re	evision number: 1	<b>Revision date:</b> 10/03/2018
	substance/mixture and of the comp	any/undertaking
1.1 Product identifiers		
Product name:		sulfonic Acid) Dihydrate [Good's buffer component for biological
Product code:	research] P1131	
1.2 Relevant identified uses of the su Identified uses:	ibstance or mixture and uses advised ag Reagents.	ainst
1.3 Details of the supplier of the safe Supplier:	ty data sheet	
TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht Telephone: +32(0)3 735 07 ( E-mail: sales-eu@tcichemica		
1.4 Emergency telephone number:	+32(0)70 245 245	
SECTION 2: Hazards identification	วท	
2.1 Classification of the substance of		
This product does not meet the crit 2.2 Label elements	eria for classification in any hazard class a	ccording to Regulation (EC) No 1272/2008
	None	
Pictograms or hazard symbols	None	
Signal word	No signal word	
Hazard statements	None	
Precautionary statements	None	
2.3 Other hazards		
Results of PBT and vPvB assessm		
PBT:	Not applicable	
vPvB:	Not applicable	
SECTION 3: Composition/inform	ation on ingredients	
3.1 Substances		
Components:	Piperazine-1,4-bis(2-hydroxypropanes research]	sulfonic Acid) Dihydrate [Good's buffer component for biological
Percent:		
CAS RN:	68189-43-5	
EC-No:	269-199-1	
Synonyms:	POPSO Dihydrate	
Chemical Formula:	$C_{10}H_{22}N_2O_8S_2 \cdot 2H_2O$	

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. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact:	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.
Ingestion:	Get medical advice/attention 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.

**<sup>4.2</sup> Most important symptoms and effects, both acute and delayed** No data available

**4.3 Indication of any immediate medical attention and special treatment needed** No data available

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), Sulfur oxides
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/per	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

SECTION 9: Physical and chemical	properties
9.1 Information on basic physical and cl	hemical properties
Physical state (20°C):	Solid
Form:	Crystal - Powder
Colour:	White - Almost 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
	<b>N N N N N</b>
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), Sulfur oxides

SECTION 11: Toxicological information		
11.1 Information on toxicological effect		
Acute Toxicity:	No data available	
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	

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	anesulfonic Acid) Dihydrate	
	[Good's buffer component for	
	biological research]	

CECTION 12. Eaclariant informa	tion	
SECTION 12: Ecological informa 12.1 Toxicity	lion	
Fish:	No data available	
Crustacea:	No data available	
Algae:	No data available	
Aigae.		
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	
12.5 Results of PBT and vPvB assess	sment	
PBT:	Not applicable	
vPvB:	Not applicable	
12.6 Other adverse effects	No data available	
SECTION 13: Disposal considera	ations	
13.1 Waste treatment methods		
	nsult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when	
SECTION 14: Transport informat	ion	
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		
ADR/RID	•	
IMDG/IMO	•	
ICAO/IATA	-	

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.

Piperazine-1,4-bis(2-hydroxyprop anesulfonic Acid) Dihydrate [Good's buffer component for biological research]

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

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