TCI EUROPE N.V.

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SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Rev	vision number: 1	Revision date: 10/03/2018
SECTION 1: Identification of the s	ubstance/mixture and of the company/unde	rtaking
1.1 Product identifiers		
Product name:	DL-Valine	
Product code:	V0013	
1.2 Relevant identified uses of the sub Identified uses:	estance or mixture and uses advised against Reagents.	
1.3 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	1	
E-mail: sales-eu@tcichemical		
1.4 Emergeney telephone number	. 22/0/70 245 245	
1.4 Emergency telephone number:	+32(0)70 245 245	
SECTION 2: Hazards identification		
2.1 Classification of the substance or This product does not meet the crite	mixture ria for classification in any hazard class according to I	Regulation (EC) No 1272/2008
2.2 Label elements		
Pictograms or hazard symbols	None	
Signal word	No signal word	
Hazard statements	None	
Precautionary statements	None	
2.3 Other hazards	None	
Results of PBT and vPvB assessme	nt	
PBT:		
VPVB:	Not applicable Not applicable	
VFVD.		
SECTION 3: Composition/informa	tion on ingredients	
3.1 Substances		
Components:	DL-Valine	
Percent:	>98.0%(T)	
CAS RN:	516-06-3	
EC-No:	208-220-0	
Synonyms:	DL-2-Aminoisovaleric Acid, H-DL-Val-OH	
Chemical Formula:	C5H11NO2	
SECTION 4: First aid measures		
4.1 Description of first aid measures		
Inhalation:	Remove victim to fresh air and keep at rest in a po	osition comfortable for breathing. Get medical
	advice/attention if you feel unwell.	
Skin contact:		othing. Rinse skin with water/shower. If skin irritation
	or rash occurs: Get medical advice/attention.	
Eye contact:	Rinse cautiously with water for several minutes. R	
Ingention	Continue rinsing. If eye irritation persists: Get med Get medical advice/attention if you feel unwell. Ri	
Ingestion:		nse moun.
Protection of first-aiders:	A rescuer should wear personal protective equipm	nent, such as rubber gloves and air-tight goggles.
4.2 Most important symptoms and effe No data available	ects, both acute and delayed	
4.3 Indication of any immediate medic No data available	al attention and special treatment needed	
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V0013	DL-Valine	Page 1 of

Dry chemical, foam, water spray, carbon dioxide.	
Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.	
Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)	
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	
asures	
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	
Prevent product from entering drains	
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.	
For disposal see section 13.	
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.	
Keep container tightly closed. Store in a cool and dark place. Store away from incompatible materials such as oxidizing agents.	
No further relevant information available.	
sonal protection	
No data available	
Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.	
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 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:	295°C (dec.)
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 information		
11.1 Information on toxicological effects		
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	

SECTION 12: Ecological informa	tion
AD A Table in	
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
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	tions
13.1 Waste treatment methods	
	nsult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent
and burn in a chemical incinerator e disposing of the substance.	equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when
disposing of the substance.	
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SECTION 15: Regulatory information

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

 Water Hazard Classes (WGK) :
 Class 1 - Low hazard to waters

 Substance of Very High Concern (SVHC) according to the
 Not listed

 REACH Regulations (EC) No.1907/2006
 Not listed

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