TCI EUROPE N.V.

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SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Rev	Revision date: 10/02/2018				
SECTION 1: Identification of the s	ubstance/mixture and of the company/undertaking				
1.1 Product identifiers		/			
Product name:	N,N-Diethylethylenediamine				
Product code:	D0505				
1.2 Relevant identified uses of the sub Identified uses:	stance or mixture and uses advised against Reagents.				
1.3 Details of the supplier of the safety Supplier:	v data sheet				
TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063					
B-2070 Zwijndrecht					
Telephone: +32(0)3 735 07 00 E-mail: sales-eu@tcichemicals) s.com				
1.4 Emergency telephone number:	+32(0)70 245 245				
SECTION 2: Hazards identification	ו				
2.1 Classification of the substance or r					
Flammable liquids	Category 3				
Acute toxicity (Dermal)	Category 3				
Acute toxicity (Dermal) Skin corrosion/irritation Serious eye damage/eye irritation 2.2 Label elements Pictograms or hazard symbols	Category 3 Category 1B Category 1				
Skin corrosion/irritation Serious eye damage/eye irritation 2.2 Label elements	Category 1B				
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Skin corrosion/irritation Serious eye damage/eye irritation 2.2 Label elements Pictograms or hazard symbols Signal word Hazard statements	Category 1B Category 1 Danger H226-Flammable liquid and vapour. H311-Toxic in contact with skin. H314-Causes severe skin burns and eye damage. P260-Do not breathe dusts or mists. P280-Wear protective gloves, protective clothing, face pr P301+P330+P331+P310-IF SWALLOWED: Rinse mouth POISON CENTER or doctor. P303+P361+P353+P310+P363-IF ON SKIN (or hair): Ta Rinse skin with water or shower. Immediately call a POIS clothing before reuse. P304+P340+P310-IF INHALED: Remove person to fresh Immediately call a POISON CENTER or doctor.	 Do NOT induce vomiting. Immediately call a ke off immediately all contaminated clothing. ON CENTER or doctor. Wash contaminated air and keep comfortable for breathing. with water for several minutes. Remove contact 			
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Skin corrosion/irritation Serious eye damage/eye irritation 2.2 Label elements Pictograms or hazard symbols Signal word Hazard statements Precautionary statements 2.3 Other hazards	Category 1B Category 1 Danger H226-Flammable liquid and vapour. H311-Toxic in contact with skin. H314-Causes severe skin burns and eye damage. P260-Do not breathe dusts or mists. P280-Wear protective gloves, protective clothing, face pr P301+P330+P331+P310-IF SWALLOWED: Rinse mouth POISON CENTER or doctor. P303+P361+P353+P310-IF SWALLOWED: Rinse mouth POISON CENTER or doctor. P303+P361+P353+P310-IF SWALLOWED: Rinse mouth POISON CENTER or doctor. P304+P340+P310-IF INHALED: Remove person to fresh Immediately call a POISON CENTER or doctor. P305+P351+P338+P310-IF IN EYES: Rinse cautiously w lenses, if present and easy to do. Continue rinsing. Immediately	 Do NOT induce vomiting. Immediately call a ke off immediately all contaminated clothing. ON CENTER or doctor. Wash contaminated air and keep comfortable for breathing. with water for several minutes. Remove contact 			

SECTION 3: Composition/information on ingredients 3.1 Substances

3.1 Substances	
Components:	N,N-Diethylethylenediamine
Percent:	>98.0%(GC)(T)
CAS RN:	100-36-7
EC-No:	202-844-7
Synonyms:	2-Diethylaminoethylamine
Chemical Formula:	C6H16N2

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. Immediately call a POISON CENTER or doctor/physician. Skin contact: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Eye contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Ingestion: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.Immediately call a POISON CENTER or doctor/physician. Ingestion: Immediately call a POISON CENTER or doctor/physician. 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 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 in large amounts, 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: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so. When extinguishing fire, be sure to wear personal protective equipment
SECTION 6: Accidental release me	asures
6.1 Personal precautions, protective equipment and emergency procedures	Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. 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	Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.
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 generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfacesNo smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour 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, dark and well-ventilated place. Store under inert gas. Store locked up. Store away from incompatible materials such as oxidizing agents. Air-sensitive
7.3 Specific end use(s)	No further relevant information available.

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SECTION 8: Exposure controls/personal protection				
8.1 Control parameters	No data available			
8.2 Exposure controls	Install a closed system or local exhaust. Also install safety shower and eye bath.			
Respiratory protection:	Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.			
Hand protection:	Impervious gloves.			
Eye protection:	Safety goggles. A face-shield, if the situation requires.			
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.			

SECTION 9: Physical and chemical proper									-	-	-
	tips	l nronert	ical	hem	and	ical	hvs	Q · F	$\cap N$	CT	SF

0.1 Information on basic physical and chemical properties		
Physical state (20°C):	Liquid	
Form:	Clear	
Colour:	Colorless - Slightly pale yellow	
Odour:	No data available	
pH:	No data available	
Melting point/freezing point:	No data available	
Boiling point/range:	146°C	
Flash point:	40°C	
Evaporation rate(Butyl Acetate=1):	No data available	
Flammability(solid, gas):	No data available	
Flammability or explosive limits:		
Lower:	0.7%	
Upper:	8.4%	
Vapour pressure:	No data available.	
Vapour density:	4.0	
Relative density:	0.82	
Solubility(ies):		
[Water]	Miscible	
[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 reactiv

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 Spark, Open flame, Static discharge		
10.5 Incompatible materials Oxidizing agents, Acids		

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects	
Acute Toxicity:	orl-rat LD50:2830 mg/kg
	ipr-mus LD50:300 mg/kg
	skn-rbt LD50:820 uL/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:	KV3500000

SECTION 12: Ecological information

12.1 Toxicity	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
40.0 Development and de verale kility	Ne dete evelleble
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
42.5 Describes of DDT and uDuD sesseen	1
12.5 Results of PBT and vPvB assessme PBT:	
PBI: vPvB:	Not applicable
VFVD.	Not applicable

12.6 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

No data available

SECTION 14: Transport information					
14.1 UN number	2685				
14.2 UN proper shipping name					
ADR/RID	N,N-Diethylethylenediami	ne			
IMDG/IMO	N,N-Diethylethylenediami	10			
ICAO/IATA	N,N-Diethylethylenediami	ne			
14.3 Transport hazard class(es)					
ADR/RID	8: Corrosive				
Subsidiary risk:	3: Flammable liquid.				
IMDG/IMO	8: Corrosive				
Subsidiary risk:	3: Flammable liquid.				
ICAO/IATA	8: Corrosive				
Subsidiary risk:	3: Flammable liquid.				
14.4 Packaging group					
ADR/RID	11				
IMDG/IMO	11				
ICAO/IATA	II				
14.5 Environmental hazards					
Marine pollutant	-				
14.6 Special precautions for user	No data available				
SECTION 15: Regulatory informa					
15.1 Safety, health and environmental	I regulations/legislation spe	cific for the substance or mixture Class 1 - Low hazard to waters			
Water Hazard Classes (WGK) : Substance of Very High Concern	(C)(UC) according to the	Not listed			
REACH Regulations (EC) No.1907		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:	10/02/2018				
		ould 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