TCI EUROPE N.V.

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SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

SECTION 1: Identification of the	substance/mixture and of the company/undertaking
1.1 Product identifiers	
Product name: Product code:	1-Isopropylpiperazine I0745
1.2 Relevant identified uses of the s Identified uses:	ubstance or mixture and uses advised against Reagents.
1.3 Details of the supplier of the safe Supplier: TCI EUROPE N.V. Boerenveldseweg 6 Haven 1063 B-2070 Zwijndrecht Telephone: +32(0)3 735 07 E-mail: sales-eu@tcichemid	00
1.4 Emergency telephone number:	+32(0)70 245 245
SECTION 2: Hazards identificati	on
2.1 Classification of the substance of	or mixture
Flammable liquids	Category 3
Acute toxicity (Dermal)	Category 3
Acute toxicity (Dermal) Skin corrosion/irritation	Category 2
,	Category 2
Skin corrosion/irritation Serious eye damage/eye irritatio	Category 2
Skin corrosion/irritation Serious eye damage/eye irritatio 2.2 Label elements	Category 2
Skin corrosion/irritation Serious eye damage/eye irritation 2.2 Label elements Pictograms or hazard symbols Of the symbols Signal word Hazard statements	Category 2 Category 2 Danger H226-Flammable liquid and vapour. H311-Toxic in contact with skin. H315-Causes skin irritation. H319-Causes serious eye irritation.
Skin corrosion/irritation Serious eye damage/eye irritation 2.2 Label elements Pictograms or hazard symbols Official contents Signal word	Category 2 Category 2 Category 2 Danger H226-Flammable liquid and vapour. H311-Toxic in contact with skin. H315-Causes skin irritation. H319-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P280-Wear protective gloves, protective clothing, eye protection. P302+P352+P312+P361+P364-IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor if you feel unwell. Take off immediately all contaminated clothing and wash it befor reuse. P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Remov contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advi or attention. P370+P378-In case of fire: Use dry chemical or dry sand to extinguish.
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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 2 Category 2 Category 2 Danger H226-Flammable liquid and vapour. H311-Toxic in contact with skin. H315-Causes skin irritation. H319-Causes serious eye irritation. P310-Keep away from heat/sparks/open flames/hot surfaces No smoking. P280-Wear protective gloves, protective clothing, eye protection. P302+P352+P312+P361+P364-IF ON SKIN: Wash with plenty of scap and water. Call a POISON CENTER or doctor if you feel unwell. Take off immediately all contaminated clothing and wash it befor reuse. P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Remov contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advi or attention. P370+P378-In case of fire: Use dry chemical or dry sand to extinguish. P403+P235-Store in a well-ventilated place. Keep cool.

SECTION 3: Composition/information on ingredients

3.1 Substances	
Components:	1-Isopropylpiperazine
Percent:	>98.0%(GC)(T)
CAS RN:	4318-42-7
EC-No:	224-345-3
Chemical Formula:	C7H16N2

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. Call a POISON CENTER or doctor/physician.
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.

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 E. Firstighting massures	
SECTION 5: Firefighting measures 5.1 Extinguishing media	
Suitable extinguishing media:	Dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media:	Water (It may scatter and spread fire.)
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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 mea	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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ECTION 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: Physica	landa	homical	nroportion
SECTION 9: PRIVSICA	arana ci	nemicai	properties

SECTION 7. THYSICAL AND CHEMICAL	properties		
1 Information on basic physical and chemical properties			
Physical state (20°C):	Liquid		
Form:	Clear		
Colour:	Colorless - Yellow		
Odour:	No data available		
pH:	No data available		
Melting point/freezing point:	No data available		
Boiling point/range:	178°C		
Flash point:	54°C		
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:	0.90		
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	Spark, Open flame, Static discharge	
10.5 Incompatible materials	Oxidizing agents, Acids	

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

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SECTION 11: Toxicological information 11.1 Information on toxicological effects

.1 Information on toxicological effects	
Acute Toxicity:	orl-rat LD50:2830 uL/kg
	skn-rbt LD50:640 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:	TM0860000

SECTION 12: Ecological information

12.1 LOXICITY	
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 assessme	ent
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 burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport information		
14.1 UN number	1992	
14.2 UN proper shipping name		
ADR/RID	Flammable liquid, toxic, n.o.s	
IMDG/IMO	Flammable liquid, toxic, n.o.s	
ICAO/IATA	Flammable liquid, toxic, n.o.s	
14.3 Transport hazard class(es)		
ADR/RID	3: Flammable liquid	
Subsidiary risk:	6.1: Toxic substance.	
IMDG/IMO	3: Flammable liquid	
Subsidiary risk:	6.1: Toxic substance.	
ICAO/IATA	3: Flammable liquid	
Subsidiary risk:	6.1: Toxic substance.	
14.4 Packaging group		
ADR/RID		
IMDG/IMO		
ICAO/IATA	III	
14.5 Environmental hazards		
Marine pollutant	-	
14.6 Special precautions for user	No data available	
SECTION 15: Regulatory informa	ation	

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: Issue date:	TCI EUROPE N.V. 10/03/2018
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