TCI EUROPE N.V.

G

SAFETY DATA SHEET

According to 1907/2006/EC, Article 31

Revi	sion number: 1 Revision date: 10/03/20
SECTION 1: Identification of the su	ibstance/mixture and of the company/undertaking
1.1 Product identifiers	
Product name:	Tetrahydrofurfurylamine
Product code:	T1072
1.2 Relevant identified uses of the subs Identified uses:	tance 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	
E-mail: sales-eu@tcichemicals	com
I.4 Emergency telephone number:	+32(0)70 245 245
SECTION 2: Hazards identification	
2.1 Classification of the substance or m	
Flammable liquids	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
	Working
Signal word	Warning
Signal word Hazard statements	H226-Flammable liquid and vapour.
•	H226-Flammable liquid and vapour. H315-Causes skin irritation.
Hazard statements	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation.
•	H226-Flammable liquid and vapour. H315-Causes skin irritation.
Hazard statements	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection.
Hazard statements	 H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs
Hazard statements	 H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse.
Hazard statements	 H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse. P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Remove
Hazard statements	 H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse. P305+P351+P338+P337+P313-IF IN EYES: 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
Hazard statements	 H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advice or attention.
Hazard statements Precautionary statements	 H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse. P305+P351+P338+P337+P313-IF IN EYES: 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
Hazard statements Precautionary statements 2.3 Other hazards	 H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse. P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Removie contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. P403+P235-Store in a well-ventilated place. Keep cool.
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse. P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Removie contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. P403+P235-Store in a well-ventilated place. Keep cool.
Hazard statements Precautionary statements 2.3 Other hazards	 H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse. P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Removie contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. P403+P235-Store in a well-ventilated place. Keep cool.
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB:	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advic or attention. P403+P235-Store in a well-ventilated place. Keep cool.
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advic or attention. P403+P235-Store in a well-ventilated place. Keep cool.
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse. P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Removie contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. P403+P235-Store in a well-ventilated place. Keep cool.
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components:	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before reuse. P305+P351+P338+P337+P313-IF IN EYES: Rinse cautiously with water for several minutes. Removie contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. P403+P235-Store in a well-ventilated place. Keep cool. It Not applicable Not applicable Tetrahydrofurfurylamine
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components: Percent:	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advic or attention. P403+P235-Store in a well-ventilated place. Keep cool. It Not applicable Not applicable Not applicable Tetrahydrofurfurylamine >98.0%(GC)(T)
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components: Percent: CAS RN:	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advic or attention. P403+P235-Store in a well-ventilated place. Keep cool. It Not applicable Not applicable Not applicable Tetrahydrofurfurylamine >98.0%(GC)(T) 4795-29-3
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components: Percent: CAS RN: EC-No:	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advice or attention. P403+P235-Store in a well-ventilated place. Keep cool. It Not applicable Not applicable Not applicable Several minutes Tetrahydrofurfurylamine >98.0%(GC)(T) 4795-29-3 225-351-9
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components: Percent: CAS RN: EC-No: Synonyms:	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advic or attention. P403+P235-Store in a well-ventilated place. Keep cool. It Not applicable Not applicable Not applicable S8.0%(GC)(T) 4795-29-3 225-351-9 2-Aminomethyltetrahydrofuran
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components: Percent: CAS RN: EC-No:	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advice or attention. P403+P235-Store in a well-ventilated place. Keep cool. It Not applicable Not applicable Not applicable Several minutes Tetrahydrofurfurylamine >98.0%(GC)(T) 4795-29-3 225-351-9
Hazard statements Precautionary statements 2.3 Other hazards Results of PBT and vPvB assessmer PBT: vPvB: SECTION 3: Composition/informat 3.1 Substances Components: Percent: CAS RN: EC-No: Synonyms:	H226-Flammable liquid and vapour. H315-Causes skin irritation. H319-Causes serious eye irritation. P210-Keep away from heat/sparks/open flames/hot surfaces No smoking. P264-Wash hands and face thoroughly after handling. P280-Wear protective gloves, eye protection. P302+P352+P332+P313+P362+P364-IF ON SKIN: Wash with plenty of water. If skin irritation occurs Get medical advice or attention. Take off contaminated clothing and wash it before 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 advic or attention. P403+P235-Store in a well-ventilated place. Keep cool. It Not applicable Not applicable Not applicable S8.0%(GC)(T) 4795-29-3 225-351-9 2-Aminomethyltetrahydrofuran

CECTION A. Electrolit	1
SECTION 4: First aid measures 4.1 Description of 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.
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 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 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 mea	asures
6.1 Personal precautions, protective	Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from
equipment and emergency procedures	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 away from incompatible materials such as oxidizing agents. Air-sensitive
7.3 Specific end use(s)	No further relevant information available.
SECTION 8: Exposure controls/per	
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:	Vapor respirator. Follow local and national regulations.
Hand protection:	Protective gloves.
Eye protection: Skin and body protection:	Safety glasses. A face-shield, if the situation requires. Protective clothing. Protective boots, if the situation requires.

T1072	Tetrahydrofurfurylamine	Page 2 of 5

Γ

SECTION 9: Physical and chemical properties

nemical properties
Liquid
Clear
Colorless - Pale yellow
No data available
No data available
No data available
155°C
48°C
No data available
No data available
No data available
No data available
No data available.
No data available
0.98
No data available
No data available
No data available
No data available
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

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

SECTION 11, Toxicological information		
SECTION 11: Toxicological information		
0	11.1 Information on toxicological effects	
Acute Toxicity:	ipr-mus LD50:200 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:	LV0175000	

SECTION 12: Ecological information	tion
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	
	sult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an observe all federal, state and local regulations when disposing of the substance.
SECTION 14: Transport informati	ion
14.1 UN number	2943
14.2 UN proper shipping name	
ADR/RID	Tetrahydrofurfurylamine
IMDG/IMO	Tetrahydrofurfurylamine
ICAO/IATA	Tetrahydrofurfurylamine
14.3 Transport hazard class(es)	
ADR/RID	3: Flammable liquid
IMDG/IMO	3: Flammable liquid
ICAO/IATA	3: Flammable liquid
14.4 Packaging group	
ADR/RID	III
IMDG/IMO	

ICAO/IATA	Ш
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 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