SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	:	Ammonia (ca. 4% in Ethanol, ca. 2.0mol/L)
Product code	:	A2236
EC-No.	:	231-635-3
Unique Formula Identifier (UFI)	:	YHV2-714H-600N-T6FN

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture	:	Use as laboratory reagent

1.3 Details of the supplier of the safety data sheet

Company	:	TCI EUROPE N.V.
Address	:	Boereveldseweg 6 - Haven 1063, B-2070 Zwijndrecht, Belgium
Telephone	:	+32 (0)3 735 07 00
Telefax	:	+32 (0)3 735 07 01
E-mail address of person responsible for the SDS	:	sales-eu@tcichemicals.com

1.4 Emergency telephone number

Emergency telephone number	:	+44 844 892 0111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2	H225: Highly flammable liquid and vapour.
Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Respiratory sensitisation, Category 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity, Category 1B	H340: May cause genetic defects.
Reproductive toxicity, Category 1A	H360: May damage fertility or the unborn child.
Specific target organ toxicity - single exposure, Category 1, Respiratory system	H370: Causes damage to organs.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 1, Liver	H372: Causes damage to organs through prolonged or repeated exposure.
Specific target organ toxicity - repeated exposure, Category 2, Nervous system, Lungs	H373: May cause damage to organs through prolonged or repeated exposure.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word	:	Danger	
Hazard statements	:	H225	Highly flammable liquid and vapour.
		H315	Causes skin irritation.
		H318	Causes serious eye damage.
		H334	May cause allergy or asthma symptoms or breathing difficul-

ties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H340 May cause genetic defects.
H360 May damage fertility or the unborn child.
H370 Causes damage to organs (Respiratory system).
H372 Causes damage to organs (Liver) through prolonged or repeated exposure.
H373 May cause damage to organs (Nervous system, Lungs) through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**

P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P391 Collect spillage.

Hazardous components which must be listed on the label:

Ethanol
Ammonia

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS RN EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Ethanol	64-17-5 200-578-6 603-002-00-5	Flam. Liq. 2; H225 Eye Irrit. 2; H319 Muta. 1B; H340 Repr. 1A; H360 STOT SE 3; H335 (Respiratory system) STOT SE 3; H336 (Central nervous system) STOT RE 1; H372	>= 90 - <= 100

		(Liver) STOT RE 2; H373 (Nervous system)	
Ammonia	7664-41-7 231-635-3 007-001-00-5	Flam. Gas 2; H221 Press. Gas Liquefied gas; H280 Acute Tox. 3; H331 Skin Corr. 1B; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 STOT SE 1; H370 (Respiratory system) STOT RE 2; H373 (Lungs) Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 3 - < 5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/ physician.

In case of skin contact : Take off all contaminated clothing immediately.
If on skin, rinse well with water.
Call a POISON CENTER or doctor/ physician.

In case of eye contact : Rinse with plenty of water.
If easy to do, remove contact lens, if worn.
Immediately call a POISON CENTER or doctor/ physician.

If swallowed : Call a POISON CENTER or doctor/ physician.
Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

None known.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry powder, Alcohol-resistant foam, Water spray, Carbon dioxide (CO2)

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : No information available.

5.3 Advice for firefighters

Special protective equipment for firefighters : Use personal protective equipment.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Immediately evacuate personnel to safe areas. Remove undamaged containers from fire area if it is safe to do so.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear suitable protective equipment. 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

Environmental precautions : Should not be released into the environment.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Collect as much of the spill as possible with a suitable absorbent material.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : Prevent generation of vapour or mist.
Take precautionary measures against static discharge.
Use explosion-proof equipment.

Local/Total ventilation : Ensure adequate ventilation.
Handle product only in closed system or provide appropriate exhaust ventilation at machinery.
Use a local exhaust ventilation.

Advice on safe handling : Avoid contact with skin, eyes and clothing.
Wear personal protective equipment.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not subject to grinding, shock or friction.
Wash hands and face thoroughly after handling.
Open drum carefully as content may be under pressure.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed. Store in a refrigerator. Keep in a well-ventilated place. Use explosion-proof equipment. Keep under inert gas. Store locked up.

Storage class (TRGS 510) : 3

7.3 Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS RN	Value type (Form of exposure)	Control parameters	Basis
Ethanol	64-17-5	AGW	200 ppm 380 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 4;(II)			
	Further information: Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
Ammonia	7664-41-7	STEL	50 ppm 36 mg/m3	2000/39/EC
	Further information: Indicative			
		TWA	20 ppm 14 mg/m3	2000/39/EC
	Further information: Indicative			

		AGW	20 ppm 14 mg/m3	DE TRGS 900
	Peak-limit: excursion factor (category): 2;(I)			
	Further information: Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., European Union (The EU has established a limit value: deviations in value and peak limit are possible), When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

8.2 Exposure controls

Engineering measures

Install a closed system or local exhaust.
Also install safety shower and eye bath.

Personal protective equipment

Eye/face protection	:	Safety glasses, Safety goggles, Face-shield
Hand protection	:	Impervious gloves
Skin and body protection	:	Impervious protective clothing
Respiratory protection	:	Gas mask Self-contained breathing apparatus

*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Colour	:	colourless
Odour	:	No data available
Odour Threshold	:	No data available
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flammability	:	No data available
Upper explosion limit/Upper flammability limit	:	No data available
Lower explosion limit/Lower flammability limit	:	No data available
Flash point	:	No data available
Auto-ignition point	:	No data available
Decomposition temperature	:	No data available
pH	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	No data available
Relative density	:	0,78
Relative vapour density	:	No data available
Particle characteristics	:	No data available

9.2 Other information

Molecular weight	:	17,03 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : None under normal processing.

10.4 Conditions to avoid

Conditions to avoid : Heat, Electrical spark, Open flame, Electrostatic discharge, Exposure to air.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents,
Acids,

10.6 Hazardous decomposition products

Nitrogen oxides (NOx),

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product:

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Components:

Ethanol:

Acute oral toxicity : LDLo (Humans): 1 400 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

LD50 (Rat): 7 g/kg

Acute inhalation toxicity : LC50 (Rat): 124 700 mg/m3
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LDLo (Rabbit): 20 000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Ammonia:

Acute inhalation toxicity : Assessment: The component/mixture is toxic after short term inhalation.

Skin corrosion/irritation

Product:

Result : Skin irritation

Components:

Ammonia:

Result : Causes burns.

Serious eye damage/eye irritation

Product:

Result : Irreversible effects on the eye

Components:

Ethanol:

Result : Eye irritation

Ammonia:

Result : Irreversible effects on the eye

Respiratory or skin sensitisation

Product:

Assessment : May cause sensitisation by inhalation.

Components:

Ammonia:

Assessment : May cause sensitisation by inhalation.

Germ cell mutagenicity

Product:

Germ cell mutagenicity- Assessment : Presumed to induce heritable mutations in the germ cells of humans.

Components:

Ethanol:

Germ cell mutagenicity- Assessment : Presumed to induce heritable mutations in the germ cells of humans.

Carcinogenicity : No information available.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment : Known human reproductive toxicant

Components:

Ethanol:

Reproductive toxicity - Assessment : Known human reproductive toxicant

STOT - single exposure

Product:

Assessment : May cause respiratory irritation., May cause drowsiness or dizziness.

Target Organs : Respiratory system
Assessment : Causes damage to organs.

Components:

Ethanol:

Assessment : May cause respiratory irritation., May cause drowsiness or dizziness.

Ammonia:

Target Organs	:	Respiratory system
Assessment	:	Causes damage to organs.

STOT - repeated exposure

Product:

Target Organs	:	Liver
Assessment	:	Causes damage to organs through prolonged or repeated exposure.
Target Organs	:	Nervous system, Lungs
Assessment	:	May cause damage to organs through prolonged or repeated exposure.

Components:

Ethanol:

Target Organs	:	Liver
Assessment	:	Causes damage to organs through prolonged or repeated exposure.
Target Organs	:	Nervous system
Assessment	:	May cause damage to organs through prolonged or repeated exposure.

Ammonia:

Target Organs	:	Lungs
Assessment	:	May cause damage to organs through prolonged or repeated exposure.
Repeated dose toxicity	:	No information available.
Aspiration hazard	:	No information available.
RTECS No.	:	KQ6300000 (Ethanol) BO0875000 (Ammonia)

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity	:	Toxic to aquatic life.
Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.

Components:

Ethanol:

Toxicity to fish	:	LC50 (Oryzias latipes (Japanese medaka)): 1 350 mg/l

Exposure time: 48 h

LC50 (Pimephales promelas (fathead minnow)): 12 720 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 8,09 mg/l
Exposure time: 48 h

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Ammonia:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,37 mg/l
Exposure time: 48 h

LC50 (Pimephales promelas (fathead minnow)): 5,9 mg/l
Exposure time: 96 h

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

Ethanol:

Partition coefficient: n-octanol/water : -0,31

12.4 Mobility in soil

Components:

Ethanol:

Distribution among environmental compartments : Koc: 0,20

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Disposal in accordance with local and national regulations. Take precautions against ignition or explode. Entrust disposal to a licensed waste disposal company.
Contaminated packaging	:	Disposal in accordance with local and national regulations. Before disposal of used container, remove contents completely.

SECTION 14: Transport information

14.1 UN number or ID number

ADR	:	UN 1170
IMDG	:	UN 1170
IATA	:	UN 1170

14.2 UN proper shipping name

ADR	:	ETHANOL SOLUTION
IMDG	:	ETHANOL SOLUTION
IATA	:	Ethanol solution

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADR	:	3	
IMDG	:	3	
IATA	:	3	

14.4 Packing group

ADR		
Packing group	:	II
Classification Code	:	F1
Hazard Identification Number	:	33
Tunnel restriction code	:	(D/E)
IMDG		
Packing group	:	II
EmS Code	:	F-E, S-D
IATA (Cargo)		
Packing instruction (cargo aircraft)	:	364
Packing instruction (LQ)	:	Y341
Packing group	:	II
IATA (Passenger)		
Packing instruction (passenger aircraft)	:	353
Packing instruction (LQ)	:	Y341
Packing group	:	II

14.5 Environmental hazards

ADR		
Environmentally hazardous	:	no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Water hazard class (Germany)	:	WGK 1 slightly hazardous to water Classification according to AwSV, Annex 1 (5.2)

Other regulations:

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The components of this product are reported in the following inventories:

CH BAGREG	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory
AICS	:	On the inventory, or in compliance with the inventory
DSL	:	All components of this product are on the Canadian DSL
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H221	:	Flammable gas.
H225	:	Highly flammable liquid and vapour.
H280	:	Contains gas under pressure; may explode if heated.
H314	:	Causes severe skin burns and eye damage.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H331	:	Toxic if inhaled.
H334	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H340	:	May cause genetic defects.
H360	:	May damage fertility or the unborn child.
H370	:	Causes damage to organs.
H372	:	Causes damage to organs through prolonged or repeated exposure.
H373	:	May cause damage to organs through prolonged or repeated exposure.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Flam. Gas	:	Flammable gases
Flam. Liq.	:	Flammable liquids
Muta.	:	Germ cell mutagenicity
Press. Gas	:	Gases under pressure
Repr.	:	Reproductive toxicity
Resp. Sens.	:	Respiratory sensitisation
Skin Corr.	:	Skin corrosion
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
DE TRGS 900	:	Germany. TRGS 900 - Occupational exposure limit values.
2000/39/EC / TWA	:	Limit Value - eight hours
2000/39/EC / STEL	:	Short term exposure limit
DE TRGS 900 / AGW	:	Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Cooperation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioac-

cumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Flam. Liq. 2	H225	Calculation method
Skin Irrit. 2	H315	Based on product data or assessment
Eye Dam. 1	H318	Based on product data or assessment
Resp. Sens. 1	H334	Based on product data or assessment
Muta. 1B	H340	Based on product data or assessment
Repr. 1A	H360	Based on product data or assessment
STOT SE 1	H370	Based on product data or assessment
STOT SE 3	H336	Based on product data or assessment
STOT SE 3	H335	Based on product data or assessment
STOT RE 1	H372	Based on product data or assessment
STOT RE 2	H373	Based on product data or assessment
Aquatic Chronic 2	H411	Based on product data or assessment

This SDS was prepared sincerely based on the information 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 operations, sufficient care should be taken, in addition to the safety measures suitable for the given 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.

DE / 6N