



**Be Right™**

**Part 1  
SAFETY DATA SHEET**

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

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

**1.1. Product identifier**

<b>Product Code(s)</b>	LCK304-1
<b>Safety data sheet number</b>	M02442
<b>Product Name</b>	LCK 304 Ammonium, Sample cuvette; 1/2
<b>Pure substance/mixture</b>	Mixture

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

<b>Recommended Use</b>	Laboratory Reagent Determination of ammonium nitrogen
<b>Uses advised against</b>	Consumer use

**1.3. Details of the supplier of the safety data sheet**

**Supplier**

HACH UK  
Laser House  
Ground Floor, Suite B  
Waterfront Quay, Salford Quays  
GB - Manchester, M50 3XW  
Tel. +44 (0) 161 872 1487  
info-uk@hach.com

HACH Ireland  
Unit 34 GB Business Park  
Little Island  
IRL-Co. Cork  
T45 H681  
Tel. +353 (0)146 02 522  
info-ie@hach.com

**1.4. Emergency telephone number**

Emergency telephone number National Poison Information Center (UZEM) - Turkey: 114  
Emergency Medical Services - Turkey: 112

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification T.C. 28848

<b>Skin corrosion/irritation</b>	Category 1 - (H314)
<b>Serious eye damage/eye irritation</b>	Category 1 - (H318)
<b>Reproductive toxicity</b>	Category 2 - (H361)
<b>Corrosive to metals</b>	Category 1 - (H290)

### 2.2. Label elements

Contains Sodium hydroxide, Sodium salicylate



**Signal word** Danger

#### Hazard statements

H314 - Causes severe skin burns and eye damage  
H361d - Suspected of damaging the unborn child  
H290 - May be corrosive to metals

#### Precautionary statements

P260 - Do not breathe dust/fume/gas/mist/vapours/spray  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor/physician

#### Additional information

This product requires tactile warnings if supplied to the general public. This product requires child resistant fastenings if supplied to the general public.

### 2.3. Other hazards

No information available

#### PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

**Chemical nature** Aqueous solution of organic and inorganic salts.

Chemical name	CAS No. EC No. Index No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)
Sodium salicylate	54-21-7 200-198-0 -	5 - 10%	Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Repr. 2 - H361 STOT SE 3 - H335	
Sodium hydroxide	1310-73-2 215-185-5 011-002-00-6	1 - 5%	Met. Corr. 1 - H290 Skin Corr. 1A - H314 Eye Dam. 1 - H318	Eye Irrit. 2 :: 0.5%<=C<2% Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Skin Irrit. 2 :: 0.5%<=C<2%

**Full text of H- and EUH-phrases: see section 16**

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>Inhalation</b>	Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical attention.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention.
<b>Ingestion</b>	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Get immediate medical attention.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

#### **4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms** Burning sensation.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

**Note to doctors** Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

#### **5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Sodium oxides.

#### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Should not be released into the

---

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

### **6.3. Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

### **6.4. Reference to other sections**

<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.
------------------------------------	--

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Remove contaminated clothing and shoes.
<b>General hygiene considerations</b>	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

### **7.2. Conditions for safe storage, including any incompatibilities**

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Keep out of the reach of children. Store away from other materials.
---------------------------	---

### **7.3. Specific end use(s)**

<b>Specific use(s)</b>	Analytical reagent.
<b>Risk Management Methods (RMM)</b>	The information required is contained in this Material Safety Data Sheet.

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

#### **Exposure Limits**

<b>Information on monitoring procedures</b>	Refer to European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) or equivalent national standard(s)
---	---

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

## 8.2. Exposure controls

### Personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)	Wear protective nitrile rubber gloves	0,70 mm	>480 minutes
Short term	Wear protective nitrile rubber gloves	0,20 mm	>30 minutes

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Recommended Filter type:** ABEK-P3.

**General hygiene considerations** Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Physical state** Liquid  
**Appearance** aqueous solution  
**Colour** light yellow  
**Odour** Odourless.  
**Odour threshold** Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Molecular weight</b>	No data available	
<b>pH</b>	12.6	@ 20 °C
<b>Melting point / freezing point</b>	~ -6 °C / 21.2 °F	

<b>Initial boiling point and boiling range</b>	~ 102 °C / 215.6 °F
<b>Evaporation rate</b>	1.1 (water = 1)
<b>Vapour pressure</b>	23.177 mm Hg / 3.09 kPa at 25 °C / 77 °F
<b>Relative vapor density</b>	0.62
<b>Partition coefficient</b>	Not applicable
<b>Autoignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	
<b>Dynamic viscosity</b>	No data available
<b>Kinematic viscosity</b>	No data available
<b>Relative density</b>	1.12 g/mL @ 20 °C

### **Solubility(ies)**

#### **Water solubility**

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Completely soluble	> 10000 mg/L	25 °C / 77 °F

#### **Solubility in other solvents**

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

### **Metal Corrosivity**

Classified as corrosive to metal according to CLP criteria

<b>Steel Corrosion Rate</b>	> 6.25 mm/yr / > 0.25 in/yr
<b>Aluminum Corrosion Rate</b>	> 6.25 mm/yr / > 0.25 in/yr

### **Explosive properties**

<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available

### **Flammable properties**

<b>Flash point</b>	No data available 100
--------------------	-----------------------

### **Flammability**

<b>Upper flammability limit:</b>	No data available
<b>Lower flammability limit</b>	No data available

### **Oxidising properties**

No data available.

### **Bulk density**

No data available

### **9.2. Other information**

No information available.

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

---

**Reactivity** Corrosive to metal.

#### 10.2. Chemical stability

**Stability** Stable under normal conditions.

#### **Explosion data**

**Sensitivity to mechanical impact** No information available.

**Sensitivity to static discharge** No information available.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

**Hazardous polymerisation** None under normal processing.

#### 10.4. Conditions to avoid

**Conditions to avoid** Exposure to air or moisture over prolonged periods.

#### 10.5. Incompatible materials

**Incompatible materials** Oxidising agent. Acids. Bases.

#### 10.6. Hazardous decomposition products

**Hazardous Decomposition Products** Thermal decomposition can lead to release of irritating and toxic gases and vapours.

### **SECTION 11: Toxicological information**

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

##### **Acute toxicity**

Based on available data, the classification criteria are not met

Mixture No data available.

Substance Test data reported below.

##### **Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium salicylate	Rat LD <sub>50</sub>	930 mg/kg	None reported	<b>Behavioral</b> Convulsions or effect on seizure threshold Muscle contraction or spasticity	RTECS

##### **Acute Toxicity Estimate (ATE)**

The following values are calculated based on chapter 3.1 of the GHS document

---



29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

<b>ATEmix (oral)</b>	10,426.00 mg/kg
<b>ATEmix (dermal)</b>	No information available

**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown toxicity.

**Skin corrosion/irritation**

Causes severe burns.

Mixture No data available.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD Test 404: Acute Dermal Corrosion/Irritation	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA
Trisodium citrate	Draize Test	Rabbit	500 mg	24 hours	Not corrosive or irritating to skin	ECHA
Sodium hydroxide	Patch test	Human	20 mg	24 hours	Corrosive to skin	RTECS

**Serious eye damage/eye irritation**

Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.

Mixture No data available.

Substance Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD Test 439: In Vitro Skin Irritation: Reconstructed Human Epidermis (Rhe) Test Method	Human	50 mg	6 hours	Eye irritant	ECHA
Trisodium citrate	Draize Test	Rabbit	0.1 mL	24 hours	Mild eye irritant	IUCLID
Sodium hydroxide	Draize Test	Rabbit	0.05 mg	24 hours	Corrosive to eyes	RTECS

**Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

**Skin Sensitization Exposure Route:**

Chemical name	Test method	Species	Results	Key literature references and sources for data
---------------	-------------	---------	---------	--

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

Sodium salicylate	Based on human experience	Human	No sensitisation responses were observed.	Vendor SDS
Trisodium citrate	OECD Test No. 406: Skin Sensitisation	Guinea pig	No sensitisation responses were observed.	IUCLID

**Respiratory Sensitization Exposure Route:**

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium salicylate	Based on human experience	Human	Not confirmed to be a respiratory sensitizer	Vendor SDS

**STOT - single exposure**

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

**Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium salicylate	Human LD <sub>Lo</sub>	700 mg/kg	None reported	Lungs, Thorax, or Respiration Dyspnea	RTECS

**STOT - repeated exposure**

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance No data available.

**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

Mixture invitro **Data** No data available.

Substance invitro **Data** Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	OECD 471	<i>Salmonella typhimurium</i>	0.158 mg/plate	48 hours	Negative	No information available
Trisodium citrate	Mutation in microorganisms	<i>Salmonella typhimurium</i>	None reported	None reported	Negative	IUCLID

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

Mixture in vivo **Data** No data available.

Substance in vivo **Data** Test data reported below.

**Oral Exposure Route:**

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium salicylate	DNA damage	Rat	30 mg/L	None reported	Positive test result for mutagenicity	RTECS

**Carcinogenicity**

Based on available data, the classification criteria are not met.

Mixture No data available.

Substance Test data reported below.

**Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Trisodium citrate	Rat	3000 mg/kg	2 years	Not Carcinogenic	IUCLID

**Reproductive toxicity**

Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.

Mixture No data available.

Substance Test data reported below.

**Oral Exposure Route:**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium salicylate	Rat TD <sub>Lo</sub>	40 mg/kg	1 days	Effects on Newborn Stillbirth	RTECS

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**11.2.**

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

**SECTION 12: Ecological information**

**12.1. Toxicity**

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

---

**Ecotoxicity:**

Based on available data, the classification criteria are not met.

**Unknown aquatic toxicity:**

Contains 0 % of components with unknown hazards to the aquatic environment.

**Mixture**

**Acute aquatic toxicity:** No data available.

**Aquatic Chronic Toxicity:** No data available.

**Substance**

**Acute aquatic toxicity:** Test data reported below.

Fish:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium salicylate	96 hours	<i>Pimephales promelas</i>	LC <sub>50</sub>	1370 mg/L	GESTIS
Sodium hydroxide	96 hours	<i>Oncorhynchus mykiss</i>	LC <sub>50</sub>	45.4 mg/L	IUCLID

Crustacea:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium hydroxide	48 Hours	<i>Daphnia sp.</i>	EC <sub>50</sub>	40.4 mg/L	IUCLID

**Aquatic Chronic Toxicity:** No data available.

**12.2. Persistence and degradability**

**Mixture:** No data available.

**12.3. Bioaccumulative potential**

**Mixture:** No data available.

Partition coefficient: Not applicable

**12.4. Mobility in soil**

Soil Organic Carbon-Water Partition Not applicable  
Coefficient:

**12.5. Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Sodium hydroxide	The substance is not PBT / vPvB

**12.6. Other adverse effects**

---

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

---

Endocrine Disruptor Information: This product does not contain any known or suspected endocrine disruptors

Ozone: Not applicable

Ozone depletion potential (ODP): No information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Do not reuse empty containers.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transport information

### IMDG

14.1 UN number or ID number	UN3316
14.2 Proper shipping name	CHEMICAL KIT
14.3 Transport hazard class(es)	9
14.4 Packing Group	II
14.5 Marine pollutant	Not applicable
14.6 Special precautions for user	251, 340
EmS-No	F-A, S-P
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	No information available

### ADR

14.1 UN number or ID number	3316
14.2 Proper shipping name	CHEMICAL KIT
14.3 Transport hazard class(es)	9
Labels	9
14.4 Packing Group	II
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	251, 340, 671
Classification code	M11
Tunnel restriction code	(E)

### IATA

14.1 UN number or ID number	UN3316
14.2 Proper shipping name	Chemical kit
14.3 Transport hazard class(es)	9
14.4 Packing group	II
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	None
ERG Code	9L

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

---

## SECTION 15: Regulatory information

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

#### National regulations

This Safety Data Sheet was compiled in accordance with 29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets".

This product is classified in accordance with 28848 dated 11 December 2013 "The Ministry of Environment, Urbanization and Climate Change of the Republic of Turkey By-Law on the Classification, Labelling and Packaging of Substances and Mixtures (SEA)".

Please refer to the following regulations or other national measures that are related.

**Persistent Organic Pollutants** Not applicable

#### International Inventories

<b>KKDIK</b>	Contact supplier for inventory compliance status
<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**KKDIK** - Turkish Inventory and Control of Chemicals  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### 15.2. Chemical safety assessment

**Chemical Safety Report** No information available

## SECTION 16: Other information

<b>Issue Date</b>	28-01-2005
<b>Revision Date</b>	08-Mar-2023

---

Revision Note updated SDS sections: 3 8

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend**

**	Hazard Designation
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieure
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service Number
Ceiling	Maximum limit value
CLP	Classification, Labelling and Packaging of substances and mixtures [Regulation (EC) No. 1272/2008]
DNEL	Derived No Effect Level (DNEL)
EC	European Community
ECHA	ECHA (The European Chemicals Agency)
EC50	Effective Concentration to 50% of a test population
EEC	European Economic Community
EN	European Standard
IMDG	International Maritime Dangerous Goods (IMDG)
IATA	International Air Transport Association (IATA)
IATA-DGR	International Air Transport Association - Dangerous Goods Regulations
ICAO	International Civil Aviation Organization
ICAO-TI	International Civil Aviation Organization - Technical Instructions
IUCLID	IUCLID (The International Uniform Chemical Information Database)
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LOAEL	Lowest observed adverse effect level
LOAEC	Lowest observed adverse effect concentration
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MAK	Maximale Arbeitsplatz-Konzentration, a German expression corresponding to threshold limit value, which relates to safe daily exposure levels to chemical substances
NOAEL	NOAEL (No observed adverse effect level)
NOAEC	No observed adverse effect concentration
OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labour)
PEC	Predicted Effect Concentration
PNEC	Predicted No Effect Concentration (PNEC)
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No. 1907/2006]
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)
SEA	Regulation on Classification, Labeling and Packaging of Substances and Mixtures (Official Gazette: 28848 (repeated), 11.12.2013)
SKN*	Skin designation
SKN+	Skin sensitisation
STEL	STEL (Short Term Exposure Limit)
STOT	Specific Target Organ Toxicity
STOT RE	Specific target organ toxicity — repeated exposure
STOT SE	Specific target organ toxicity — single exposure
SVHC	Substances of Very High Concern
TLV	Threshold Limit Value
TRGS	Technical rules for hazardous substances, Germany
TSCA	Toxic Substances Control Act
TWA	TWA (time-weighted average)

---

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets

UN United Nations  
vPvB very persistent and very bioaccumulative  
VOC Volatile organic compounds  
AwSV Administrative regulation of water polluting substances, Germany

**Key literature references and sources for data** See Section 11: TOXICOLOGICAL INFORMATION  
See Section 12: ECOLOGICAL INFORMATION

#### Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration toxicity	Calculation method
Ozone	Calculation method
Corrosive to metals	On basis of test data

#### Full text of H-Statements referred to under section 3

H290 - May be corrosive to metals  
H302 - Harmful if swallowed  
H318 - Causes serious eye damage  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation

**Prepared By** Hach Product Compliance Department

**Restrictions on use** For Laboratory Use Only.

**Training Advice** The personnel assigned to the transportation of this gas must have a certificate attesting to their qualification and awarded by an acknowledged organization.  
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Further information** Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Disclaimer

**USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.**



**Revision Date** 08-Mar-2023  
**Issue Date** 28-01-2005

**Version** 1

29204 dated 13 December 2014, "The Ministry of Environment and Urbanization of the Republic of Turkey on Hazardous Materials and Mixtures Regulation on Safety Data Sheets"

---

**The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.**

**HACH COMPANY©2023**

**End of Safety Data Sheet**