



SAFETY DATA SHEET

This Safety Data Sheet was compiled in accordance with regulation 30105 dated 23 June 2017
"Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (KKDIK)"

Revision Date 11-Mar-2024
Issue Date 22-02-2005

Version 1.2

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

1.1. Product identifier

Product Code(s) LCK360-1
Product Name LCK360 Zinc, Sample cuvette; 1/4
Safety data sheet number M03625
Pure substance/mixture Mixture

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

Recommended Use Water Analysis Determination of zinc
Uses advised against No information available

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 according to Turkish CLP (28848), as amended

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Chronic aquatic toxicity	Category 3 - (H412)
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2.2. Label elements

Hazard statements

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 - Avoid release to the environment.

P501 - Dispose of contents/ container to an approved waste disposal plant.

2.3. Other hazards

Harmful to aquatic life.

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 alkaline solution.

Chemical name	CAS No. EC No. Index No.	Weight-%	Classification according to Turkish CLP (28848), as amended	Specific concentration limit (SCL)	KKDIK registration number
Disodium carbonate	497-19-8 207-838-8 (011-005-00-2) 011-005-00-2	1 - 5%	Eye Irrit. 2 - H319 Acute Tox. 4 - H332		Not available
Potassium cyanide	151-50-8 205-792-3 (006-007-00-5) 006-007-00-5	<1%	Met. Corr. 1 - H290 Acute Tox. 1 - H300 Acute Tox. 1 - H310 Acute Tox. 1 - H330 STOT SE 1 - H370 STOT RE 1 - H372 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		Not available

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Rinse mouth. Get medical attention.

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

Symptoms	Irritating.
Effects of Exposure	No information available.

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

Note to doctors	Treat symptomatically.
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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 Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Hazardous combustion products None reported.

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 Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Should not be released into the environment. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up 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.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray. Take off contaminated clothing and wash it before reuse.

General hygiene considerations Take off all contaminated clothing and wash it before reuse. Barrier creams may help to protect the exposed areas of skin.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep at temperatures between 15 and 25 °C.

7.3. Specific end use(s)

Specific use(s) Analytical reagent.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	Türkiye	European Union	ACGIH TLV
Potassium cyanide	-	TWA: 1 mg/m ³ CN	Sk*

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151-50-8		STEL: 5 mg/m ³ CN Sk*	Ceiling: 5 mg/m ³ CN
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Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Potassium cyanide 151-50-8	-	0.14 mg/kg bw/day [4] [6] 4.03 mg/kg bw/day [4] [7]	0.94 mg/m ³ [4] [6] 12.5 mg/m ³ [4] [7]

Notes

[4] Systemic health effects

[6] Long term.

[7] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Potassium cyanide 151-50-8	1 µg/L	3.2 µg/L	0.2 µg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Potassium cyanide 151-50-8	4 µg/kg sediment dw	0.8 µg/kg sediment dw	50 µg/L	7 µg/kg soil dw	-

8.2. Exposure controls

Engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand protection

Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374-1:2016 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III acco.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)	Wear protective Viton™ gloves	0,70 mm	>480 minutes

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Short term	Wear protective nitrile rubber gloves	0,20 mm	>30 minutes
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Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Recommended filter type:	ABEK-P3.
General hygiene considerations	Take off all contaminated clothing and wash it before reuse. Barrier creams may help to protect the exposed areas of skin.
Environmental exposure controls	Do not allow into any sewer, on the ground or into any body of water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	colourless
Odour	Odourless.
Odour threshold	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	Not applicable	
pH	8 - 11	@ 20 °C
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	
Evaporation rate	No data available	
Vapour pressure	15.002 mm Hg / 2 kPa at 20 °C / 68 °F	
Relative vapor density	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Viscosity		
Dynamic viscosity	No data available	
Kinematic viscosity	No data available	
Relative density	1.04 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	20 °C / 68 °F

Solubility in other solvents

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
None reported	No information available	No data available	No information available

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Metal Corrosivity

Steel Corrosion Rate	No data available
Aluminum Corrosion Rate	No data available

Explosive properties

Upper explosion limit	No data available
Lower explosion limit	No data available

Flammable properties

Flash point	No data available
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Flammability

Upper flammability limit:	No data available
Lower flammability limit	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

Reactivity	Contact with acids liberates toxic gas.
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10.2. Chemical stability

Stability	Stable under normal conditions.
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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	Contact with acids liberates toxic gas.
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Hazardous polymerisation	Hazardous polymerisation does not occur.
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10.4. Conditions to avoid

Conditions to avoid	Extremes of temperature and direct sunlight.
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10.5. Incompatible materials

Incompatible materials	None known based on information supplied.
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10.6. Hazardous decomposition products

Hazardous Decomposition Products Hydrogen cyanide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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
Disodium carbonate	Rat LD ₅₀	4090 mg/kg	None reported	None reported	IUCLID
Sodium bicarbonate	Rat LD ₅₀	4220 mg/kg	None reported	None reported	Vendor SDS
Potassium cyanide	Rat LD ₅₀	5 mg/kg	None reported	None reported	GESTIS

Dermal Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Disodium carbonate	Mouse LD ₅₀	2210 mg/kg	None reported	None reported	No information available
Potassium cyanide	Rabbit LD ₅₀	22.3 mg/kg	None reported	None reported	Vendor SDS

Inhalation (Dust/Mist) Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Disodium carbonate	Rat LC ₅₀	1.15 mg/L	4 hours	None reported	IUCLID
Sodium bicarbonate	Rat LC ₅₀	> 4.47 mg/L	4 hours	None reported	OECD 429: Skin Sensitization: Local Lymph Node Assay
Potassium cyanide	Rat LC ₅₀	0.04 mg/L	4 hours	None reported	ERMA

Acute Toxicity Estimate (ATE) Not applicable

ATEmix (oral)	4,237.30 mg/kg
ATEmix (dermal)	18,898.30 mg/kg
ATEmix (inhalation-dust/mist)	22.23 mg/l

Unknown acute toxicity

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

Skin corrosion/irritation

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

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
Disodium carbonate	Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	ECHA HSDB
Sodium bicarbonate	Draize Test	Human	30 mg	3 days	Mild skin irritant	RTECS

Serious eye damage/eye irritation

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

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
Disodium carbonate	Draize Test	Rabbit	100 mg	24 hours	Eye irritant	HSDB
Sodium bicarbonate	Draize Test	Rabbit	100 mg	0.5 minutes	Mild eye irritant	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
Sodium bicarbonate	Based on human experience	Human	No sensitisation responses were observed.	No information available

Respiratory Sensitization Exposure Route:

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium bicarbonate	Based on human experience	Human	Not confirmed to be a respiratory sensitizer	No information available

STOT - single exposure

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

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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 bicarbonate	Infant TD _{Lo}	1260 mg/kg	None reported	Kidney, Ureter, or Bladder Urine volume increased Lungs, Thorax, or Respiration Other changes	RTECS
Potassium cyanide	Man TD _{Lo}	13.7 mg/kg	None reported	Behavioral Coma Convulsions or effect on seizure threshold Blood Metabolic acidosis	RTECS

STOT - repeated 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 bicarbonate	Man TD _{Lo}	20 mg/kg	5 days	Gastrointestinal Nausea or vomiting Nutritional and Gross Metabolic Metabolic acidosis	RTECS
Potassium cyanide	Rat TD _{Lo}	4.5 mg/kg	15 days	Nutritional and Gross Metabolic Evidence of thyroid hypofunction, Changes in thyroid weight	RTECS

Inhalation (Dust/Mist) Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium bicarbonate	Rat TC _{Lo}	77.2 mg/L	119 days	Blood Changes in serum composition (e.g. TP, bilirubin, cholesterol) Cardiac Other changes Nutritional and Gross Metabolic	RTECS

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				Changes in sodium	
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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
Potassium cyanide	DNA inhibition	Mouse lymphocyte	1 mmol/L	None reported	Positive test result for mutagenicity	RTECS

Mixture invivo **Data** No data available.

Substance invivo **Data** No data available.

Carcinogenicity

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

Mixture No data available.

Substance No data available.

Reproductive 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
Potassium cyanide	Domestic mammal - Not specified TD _{Lo}	1767 mg/kg	12 weeks	Effects on Newborn Other neonatal measures or effects Weaning or lactation index (e.g. # alive at weaning per # alive at day 4)	RTECS

Aspiration hazard

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

11.2. Information on other hazards

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

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

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
Disodium carbonate	96 hours	<i>Lepomis macrochirus</i>	LC ₅₀	300 mg/L	IUCLID
Sodium bicarbonate	96 hours	<i>Lepomis macrochirus</i>	LC ₅₀	7100 mg/L	PEEN
Potassium cyanide	96 hours	None reported	LC ₅₀	0.068 mg/L	GESTIS

Crustacea:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Disodium carbonate	48 Hours	<i>Daphnia magna</i>	EC ₅₀	265 mg/L	IUCLID
Sodium bicarbonate	48 Hours	<i>Daphnia magna</i>	EC ₅₀	4100 mg/L	PEEN
Potassium cyanide	48 Hours	None reported	LC ₅₀	0.25 mg/L	GESTIS

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: No data available

12.4. Mobility in soil

Soil Organic Carbon-Water Partition Coefficient: No data available

12.5. Results of PBT and vPvB assessment

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

Chemical name	PBT and vPvB assessment
Disodium carbonate	The substance is not PBT / vPvB
Potassium cyanide	The substance is not PBT / vPvB

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

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Potassium cyanide	Group III Chemical	-	-

Ozone: Not applicable

Ozone depletion potential (ODP): No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
Other Information	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 UN proper shipping name	CHEMICAL KIT
14.3 Transport hazard class(es)	9
14.4 Packing Group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	251, 340
EmS-No	F-A, S-P
14.7 Maritime transport in bulk according to IMO instruments	No information available

ADR

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

IATA

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

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

Additional information

This product forms part of a kit. Information in this section relates to the kit as a whole.

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 regulation 30105 dated 23 June 2017 "Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (KKDIK)"

This product is classified in accordance with 28848 dated 11 December 2013 "The Ministry of Environment and Urbanisation of the Republic of Türkiye Regulation on Classification, Labelling and Packaging (CLP) of Dangerous Substances and Preparations" As amended by regulation 31330 dated 10 December 2020 "Regulation on Classification, Labelling and Packaging of Substances and Mixtures"

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

Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Potassium cyanide 151-50-8	67	-

Health and Safety Measures Involving Chemical Substances at Workplaces - Prohibited Substances

None

Dangerous substance category per Regulation on prevention of major industrial accidents and lessening their adverse impacts (30702)

Non-controlled

Ozone-depleting substances (ODS)

Not applicable

The Rotterdam Convention

Not applicable

The Stockholm Convention on Persistent Organic Pollutants

Not applicable

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The Montreal Protocol on Substances that Deplete the Ozone Layer

Not applicable

International Inventories

KKDIK	Contact supplier for inventory compliance status
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	-

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

NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Issue Date 11-Mar-2024

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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)

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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)
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

Full text of H-Statements referred to under section 3

H300 - Fatal if swallowed
H310 - Fatal in contact with skin
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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TWA Ceiling	TWA (time-weighted average) Maximum limit value	STEL SKN*	STEL (Short Term Exposure Limit) Skin designation
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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
Reproductive toxicity	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

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

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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"

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.

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.

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End of Safety Data Sheet