Safety Data Sheet according to Regulation (EC) No. 1907/2006 (RFACH)



Revision Date: 30.11.2022 Version 2

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

1.1 Product identifier

Catalog No. TK.930154.00000
Product Name Tetrahydrofuran

Cas no 109-99-9

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

1.2.1. Relevant identified uses

Industrial use. Use as a laboratory reagent.

1.2.2. Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Name TEKKİM KİMYA SAN. TİC. LTD. ŞTİ.

Street ORGANİZE SAN. BÖL. MAVİ CAD. 8. SOK. NO :1 NİLÜFER / BURSA

Telephone 0224 243 21 71

E-mail erhan@tekkim.com.tr

Company Representative Erhan DİLER

1.4 Emergency Telephone Number +90 506 990 36 86

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Flammable liquids, Category 2 Acute toxicity, Oral, Category 4 Eye irritation, Category 2 Carcinogenicity, Category 2

Specific Target Organ Toxicity – Single exposure, Category 3, Central nervous system Specific Target Organ Toxicity – Single exposure, Category 3, Respiratory system

For the full text of the H and EUH statements referred to in this section, see section 16.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

Hazard pictograms







Signal word (SEA)

DANGER

Hazard Statements (SEA)

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

Precautionary Statements (SEA)







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Prevention

P201 Read special instructions before use.

P202 Do not handle until all precautionary statements have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

Intervention

P301+P312 IF SWALLOWED: Call 114 POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if fitted and easy to do. Continue rinsing.

Revision Date: 30.11.2022

Version 2

P308+P313 IF exposed and concerned: Get medical advice/attention.

SECTION 3: Composition/information on ingredients

Classification according to Regulation (EC) No. 1272/2008 (CLP)

3.1 Maddeler

 EC No
 203-726-8

 Molar mass
 72.11 g/mol

 Cas No
 109-99-9

 Concentration
 (<= 100 %)</td>

SECTION 4: First aid measures

4.1 Description of first aid measures

General information In case of accident or unwellness, seek medical advice immediately

(show directions for use or safety data sheet if possible).

Following inhalation Remove casualty to fresh air and keep warm and at rest..

Following skin contact Wash with plenty of water. Take off contaminated clothing.

Following eye contact In case of contact with eyes, rinse immediately with plenty of water and

consult an ophthalmologist.

Following ingestion Give up to two glasses of water. Get medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam. Dry extinguishing powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

There is no restriction for this item.

5.2 Special hazards arising from the substance or mixture

Carbon oxides. Flammable. There may be a flashback. Be careful. Heavy-than-air vapors may form on the floor surface. In case of fire, dangerous flammable gases or vapors may develop. Forms explosive mixtures with air at atmospheric temperature.

5.3 Advice for firefighters

Special protective equipment for firefighters

Do not stay in dangerous zone without self-contained breathing apparatus. Keep a safe distance to cut off contact with skin and wear suitable protective clothing.

5.4 Additional information

Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures







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Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Revision Date: 30.11.2022 Version 2



Advice for non-emergency personnel: Don't breathe vapours, aerosols. Avoid substance contact. Keep away from head and source of ignition. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert..

6.2 Environmental precautions

Do not discharge into sewer. Risk of explosion.

6.3 Methods and material for containment and cleaning up

Close drainage channels. Take up with liquid-absorbent material. Clean the affected area.

6.4 Reference to other sections

Disposal: see section 13.

6.5 Additional information

Clear spills immediately.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Advices on safe handling

Observe label precautions. Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advices on general occupational hygiene

Change contaminated clothing. Wash hands after working with substance. It is recommended to use a skin protection cream.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Protect from light. Keep container tightly closed in dry and well-ventilated places. Keep away from heat and anything that can cause ignition.

7.3 Specific end uses

There are no other specific uses other than those mentioned in section 1.2.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Tetrahydrofuran (109-99-9)

TWA (8 Hours) 50 ppm

150 mg/m3

STEL (15 Min.) 100 ppm

300 mg/m3

8.2 Exposure controls

Appropriate engineering controls

More attention should be paid to technical measures against the use of personal protective equipment.

Personal protection equipment

Eye/face protection

Safety glasses

Hand protection

Hand protection

In contact with splash

Glove material: butyl rubber Glove thickness: 0.7 mm Absorption time: > 10 minutes

The gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resulting standard EN374.







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Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Revision Date: 30.11.2022 Version 2



Other skin protection

Flame reterdant antistatic protective chlothing.

Respiratory protection

Required when vapors/aerosols are generated.

Recommended Filter type: Filter A (according to DIN 3181), for vapors of organic compounds

SECTION 9: Physical and chemical Properties

9.1 Information on basic physical and chemical properties

Physical state Liquid Colour Colorless Odour Characteristic Odour threshold No information.

7,0 - 8,0 200 g/l 20 °C pH value

Melting point/freezing point -108,5 °C No information. Freezing point 65 - 66 °C Initial boiling point and boiling range -21,5 °C Flash point

Evaporation rate No information.

215 °C Flammability (solid, gas) 1,8 %(V) Upper/lower flammability or explosive limits Upper/lower flammability or explosive limits 11,8 %(V) 170 hPa 20 °C Vapour pressure Vapour density 2.5 25 °C

Density 0,89 g/cm3 20 °C Relative density No information. Water solubility (g/l) Soluble.

Fat solubility (g/l) No information.

Partition coefficient: n-octanol/water log Pow: 0,45 25 °C - Bioaccumulation is not

expected. No information. Auto-ignition temperature No information. Decomposition temperature

Viscosity

Kinematic viscosity 0,518 mm2/s 25 °C Dynamic viscosity 0,456 mPa,s 25 °C Not classified as explosive. Explosive properties

Oxidising properties none

SECTION 10: Stability and Reactivity

10.1 Reactivity

The formation of peroxides is possible. Vapors may form explosive mixture with air.

10.2 Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

Risk of explosion and/or formation of toxic gases by alkali hydroxides, bromine, hydrides, potassium, lithium aluminum hydride, oxidizing agents, oxygen.

They give exothermic reaction with acids, halides, peroxy compounds.

10.4 Conditions to avoid

Heat, flames and sparks. to temperate. Moisture.

10.5 Incompatible materials

Rubber, various plastics, tin.

10.6 Hazardous decomposition products

Peroxides.

SECTION 11: Toxicological information







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Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)



11.1 Information on toxicological effects

Acute oral toxicity LD50 Oral - Rat - male and female - 1,650 mg/kg (ECHA)

Acute respiratory toxicity LC50 Inhalation - Rat - male and female - 4 h - > 16.9 mg/l (US-EPA)

Acute dermal toxicity LD50 Dermal - Rat - male and female - > 2.000 mg/kg (OECD Testing Guide 402)

Serious eye damage/eye irritation Eyes - Rabbit Result: Eye irritation (ECHA)

Specific Target Organ Toxicity – Single exposure If inhaled - May cause respiratory irritation. - The respiratory system May cause drowsiness or dizziness. - Nervous system

11.2 Additional information

Handle in accordance with good industrial hygiene and safety practice

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

flow-through test LC50 - Pimephales promelas (Carp calf) - 2,160 mg/l - 96 h (OECD Testing Guide 203)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 3.485 mg/l - 48 h (OECD Testing Guide 202)

Toxicity to bacteria static test EC20 - activated sludge - approx. 800 mg/l - 0.5 h (OECD Testing Guide 209)

12.2 Persistence and degradability

Biodegradability

aerobic (aerobic) Biochemical oxygen demand - Exposure time 28 d Result: 39% - Not easily degraded.

(OECD Test Guide 301D)

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB.

12.6 Other adverse effects

Discharge into environment must be avoided.

SECTION 13: Disposal considerations

Waste treatment methods

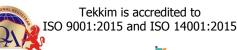
It must be disposed of in accordance with national and local regulations. Do not mix with other products. Uncleaned Treat packages as if it were the product itself ... Waste materials must be disposed of in accordance with national and local regulations.

Revision Date: 30.11.2022

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ADR

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Revision Date: 30.11.2022 Version 2

ADN

14.1 UN number				
UN 2056	UN 2056	UN 2056	UN 2056	UN 2056
14.2 UN proper shipping name				
TETRAHYDROFURAN	TETRAHYDROFURAN	TETRAHYDROFURAN	TETRAHYDROFURAN	TETRAHYDROFURAN

IATA

14.3 Transport hazard class(es)

3 3

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П

14.5 Environmental hazards

No information available. No information available.

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NO NO

No information available. No information available. No information available.

14.6 Special Precautions for User:

No information available.

SECTION 15: Regulatory information

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

This product safety data sheet complies with the requirements of EU Regulation 1907/2006.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been conducted for this substance.

SECTION 16: Other informations

Full text of H statements

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H319 Causes serious eve irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

Person Who Prepared the Safety Data Sheet:

Name:

Erhan DİLER Certificate Number and Date:

11.29.03 & 11 Şubat 2020 Communication information:

05069903686







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