

# Safety Data Sheet

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

Revision Date: 28.09.2022 Version 2

# TEKKİM

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

### 1.1 Product identifier

Catalog No. TK.911021.00000  
Product Name Toluene  
Cas no 108-88-3

### 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. Scientific research and development.

#### 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  
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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  
Skin irritation, Category 2  
Reproductive toxicity, Category 2  
Specific Target Organ Toxicity – Single exposure, Category 3, Central nervous system  
Specific Target Organ Toxicity – Repeated exposure, Category 2, Central nervous system  
Aspiration toxicity, Category 1  
Long (chronic) aquatic hazard, Category 3

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.  
H304 Fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H361d Suspected of damaging the unborn child.  
H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements (SEA)



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## Prevention

- P201 Read special instructions before use.  
P210 Keep away from heat/sparks/open flames/hot surfaces. -No smoking.  
P273 Avoid release to the environment.

## Intervention

- P301+P310 IF SWALLOWED: Call a POISON CENTER 114 or doctor/physician.  
P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse your skin with water/shower.  
P331 Do not induce vomiting.

## SECTION 3: Composition/information on ingredients

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

### 3.1 Maddeler

EC No	203-625-9
Molar mass	92.14 g/mol
Cas No	108-88-3
Concentration	(<= 100 % )

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<i>General information</i>	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
<i>Following inhalation</i>	Remove casualty to fresh air and keep warm and at rest..
<i>Following skin contact</i>	Wash with plenty of water. Take off contaminated clothing.
<i>Following eye contact</i>	In case of contact with eyes, rinse immediately with plenty of water and consult an ophthalmologist.
<i>Following ingestion</i>	After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician 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. Heavy-than-air vapors may form on the floor surface. May form explosive mixture with air at intense temperatures. In case of fire, dangerous flammable gases or vapors may develop. There may be glare. Be careful.

### 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



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## 6.1 Personal precautions, protective equipment and emergency procedures

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

Be careful not to mix into the 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*

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


Toluene		(108-88-3)
EN MAK	Acceptable maximum concentration (MAK)	750 mg/m <sup>3</sup>
EN OEL	Skin description: Can be absorbed through the skin.	
	Another time unless specified, 15 for a minute not to be exceeded exposure upper limit value (STEL):	100 mbp 384 mg/m <sup>3</sup>
	8 hour set for reference time measured or calculated time weighted average (TWA):	50 mbp 192 mg/m <sup>3</sup>

### 8.2 Exposure controls

Appropriate engineering controls



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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 full contact

Glove material : Viton (R)

Glove thickness: 0.7 mm

Absorption time: > 480 minutes

In contact with splash

Glove material : Viton (R)

Glove thickness: 0.7 mm

Absorption time: > 480 minutes

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

### Other skin protection

Flame retardant antistatic protective clothing.

### 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



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Physical state	Liquid
Colour	Colorless
Odour	Characteristic
Odour threshold	0,2 - 68,6 mbp
pH value	Not applicable.
Melting point/freezing point	-95 °C
Freezing point	No information.
Initial boiling point and boiling range	110,6 °C 1.013 hPa
Flash point	4 °C 1.013 hPa
Evaporation rate	No information.
Flammability (solid, gas)	535 °C
Upper/lower flammability or explosive limits	1,1 %(V)
Upper/lower flammability or explosive limits	7,1 %(V)
Vapour pressure	30,8 hPa 20 °C
Vapour density	3,18
Density	0,87 g/cm <sup>3</sup> 20 °C
Relative density	No information.
Water solubility (g/l)	0,58 g/l 20 °C
Fat solubility (g/l)	No information.
Partition coefficient: n-octanol/water	log Pow: 2,73(experimental)(IUCLID)
Auto-ignition temperature	Bioaccumulation is not expected.
Decomposition temperature	No information.
Viscosity	No information.
Kinematic viscosity	No information.
Dynamic viscosity	0,6 mPa.s 20 °C
Explosive properties	Not classified as explosive.
Oxidising properties	none

## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

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

There is a risk of explosion with fragrant sulfuric acid, nitric acid, silver, perchlorates, nitrogen dioxide, nonmetal halides, acetic acid, halogen-halogen compounds, uranium hexafluoride, organic nitro compounds.

Violent reactions possible with strong acids, strong oxidizing agents.

### 10.4 Conditions to avoid

In case of warming.

### 10.5 Incompatible materials

Rubber, various plastics.

### 10.6 Hazardous decomposition products


No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects



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Acute oral toxicity  
LD50 Rat: 5,580 mg/kg

Acute inhalation toxicity  
LC50 Inhalation - Rat - male and female - 4 h - 25.7 mg/l  
(OECD Testing Guide 403)

Acute dermal toxicity  
LD50 Dermal - Rabbit - > 5,000 mg/kg  
(ECHA)

Skin corrosion/irritation  
Skin - Rabbit  
Result: irritant - 4 h  
(ECHA)

Serious eye damage/eye irritation  
Eyes - Rabbit  
Result: slight irritation  
(OECD Testing Guide 405)

Reproductive toxicity  
Suspected of causing damage to the unborn child.

Specific Target Organ Toxicity – Single exposure  
May cause drowsiness or dizziness. - central nervous system

Specific Target Organ Toxicity – Repeated exposure  
May cause damage to organs through prolonged or repeated exposure. - central nervous system

Aspiration toxicity  
Aspiration toxicity, Inhalation may cause pulmonary edema and pneumonitis.

## 11.2 Additional information

After absorption:  
Headache, vomiting, nausea, dizziness, CNS disorders, intoxication, convulsions, circulatory dysfunction, respiratory paralysis, respiratory arrest, unconsciousness, death.  
Handle in accordance with safety and hygiene rules.

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish  
flow-through test LC50 - Oncorhynchus kisutch (coho salmon) - 5.5 mg/l - 96 h  
(ECHA)

Toxicity to daphnia and other aquatic invertebrates  
EC50 - Ceriodaphnia dubia (dappie) - 3.78 mg/l - 48 h  
(US-EPA)

Toxicity to bacteria  
static test EC50 - Bacteria - 84 mg/l - 24 h  
(ECHA)


### 12.2 Persistence and degradability

Biodegradability  
Oxygenated ( aerobic ) - Exposure time 20 d  
Result: 86 % - Easily degradable.  
(IUCLID)

### 12.3 Bioaccumulative potential



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Bioaccumulation  
Leuciscus idus (Golden orpheus) - 3 d - 0.05 mg/l(Toluol)

Bioconcentration factor (BCF): 90

## 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.

## SECTION 14: Transport information

ADR	IMDG	IATA	ADN	RID
<b>14.1 UN number</b> UN 1294	UN 1294	UN 1294	UN 1294	UN 1294
<b>14.2 UN proper shipping name</b> Toluene	Toluene	Toluene	Toluene	Toluene

### 14.3 Transport hazard class(es)

3 3 3 3 3



### 14.4 Packing group

II II II II II

### 14.5 Environmental hazards

NO NO NO NO NO

No information available. No information available. 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



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H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure.  
H412 Harmful to aquatic life with long lasting effects.

## 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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