



# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

Date of issue: 31/03/1999

Revision date: 01/03/2018

Version: 12.0

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

#### 1.1. Product identifier

Chemical type : Substance  
Name : Toluene  
Trade name : Toluene  
EC index no : 601-021-00-3  
EC no : 203-625-9  
CAS No : 108-88-3  
REACH registration No. : 01-2119471310-51-0016  
Local code : 11010046  
IUPAC : toluene  
Chemical name : toluene  
Formula : C<sub>7</sub>H<sub>8</sub>  
Synonyms : methylbenzene

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use, Consumer use  
Industrial/Professional use spec : Intermediate  
Polymer production  
Use in laboratories  
Explosives manufacture & use  
Rubber production and processing  
Use as a fuel  
Use in Cleaning Agents  
Road and construction applications  
Manufacture of substance  
Distribution of substance  
Uses in Coatings  
Use in Oil and Gas field drilling and production operations  
Use as binders and release agents  
Functional Fluids  
Formulation & (re)packing of substances and mixtures  
Function or use category : Adhesives, binding agents, Cleaning/washing agents and additives, Construction materials additives, Fuels, Intermediates, Laboratory chemicals

##### 1.2.2. Uses advised against

No relevant data available

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

SLOVNAFT, a.s.  
Vlčie hrdlo 1  
824 12 Bratislava - Slovakia  
T +421-(0)2/4055-1111 - F +421-(0)2/5859-9759  
[slovnaftreach@slovnaft.sk](mailto:slovnaftreach@slovnaft.sk) - [www.slovnaft.sk](http://www.slovnaft.sk)

#### 1.4. Emergency telephone number

Emergency number : Podnikový dispečing 1: ++0421(0)2/4055 3344  
Podnikový dispečing 2: ++0421(0)2/4055 2244  
fax: ++0421(0)2/4055 8047  
E-mail: podnikovydispecing1@slovnaft.sk, podnikovydispecing2@slovnaft.sk

Country	Organisation/Company	Address	Emergency number
HUNGARY	Országos Kémiai Biztonsági Intézet (National Institute of Chemical Safety) Egészségügyi Toxikológiai Tájékoztató Szolgálat (Health Toxicological Information Service)	1437 Budapest PO Box 839 1097 Budapest, Nagyváradi tér 2	+36-80-20-11-99
HUNGARY	Vegyipari Riasztási és Információs Központ (VERIK) FER TŰZOLTÓSÁG ÉS SZOLGÁLTATÓ KFT. (0-24 órás)	OLAJMUNKÁS ÚT. 2. 2433 Százhalombatta	+36-23-551-909
SLOVAKIA	Toxikologické informačné centrum FN s poliklinikou University Hospital Bratislava	Limbová 5 833 05 Bratislava	+421 2 54 77 4 166
UNITED KINGDOM	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
UNITED KINGDOM	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)

# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

Country	Organisation/Company	Address	Emergency number
UNITED KINGDOM	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
UNITED KINGDOM	NPIS Edinburgh (Scottish Poisons Information Bureau) Royal Infirmary of Edinburgh	51 Little France Crescent EH16 4SA Edinburgh	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
UNITED KINGDOM	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241
UNITED KINGDOM	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	Claremont Place Newcastle-upon-Tyne NE1 4LP Newcastle	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### 2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Flam. Liq. 2 H225  
Skin Irrit. 2 H315  
Asp. Tox. 1 H304  
Repr. 2 H361  
STOT SE 3 H336  
STOT RE 2 H373

Full text of H-phrases: see section 16

#### 2.1.2. Adverse physicochemical, human health and environmental effects

No relevant data available

### 2.2. Label elements

#### 2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour  
H315 - Causes skin irritation  
H304 - May be fatal if swallowed and enters airways  
H361 - Suspected of damaging fertility or the unborn child  
H336 - May cause drowsiness or dizziness  
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (CLP) :

P202 - Do not handle until all safety precautions have been read and understood  
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P243 - Take precautionary measures against static discharge  
P260 - Do not breathe dust, fume, gas, vapours, mist, spray  
P280 - Wear eye protection, face protection, protective clothing, protective gloves  
P301+P310 - If swallowed, immediately call a doctor.  
P331 - Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing  
P308+P313 - IF exposed or concerned: Get medical advice/attention

### 2.3. Other hazards

No relevant data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier		% (w/w) Concentration (range)	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
	CAS No	EC no		
toluene	108-88-3	203-625-9	99,7 - 99,91	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304

# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

Name	Product identifier		% (w/w) Concentration (range)	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
	CAS No	EC no		
benzene	71-43-2	200-753-7	0,005 - 0,06	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304
ethylbenzene	100-41-4	202-849-4	0,01 - 0,03	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation), H332 STOT RE 2 H373 (hearing organs) Asp. Tox. 1 H304
m-xylene;	108-38-3	203-576-3	0,005 - 0,02	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
p-xylene;	106-42-3	203-396-5	0,005 - 0,02	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315
o-Xylene	95-47-6	202-422-2	0,0005 - 0,002	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315

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

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: Before attempting to rescue casualties, isolate area from all potential sources of ignition including disconnecting electrical supply.

Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces.

Drench contaminated clothing with water before removing to avoid risk of sparks from static electricity.

First-aid measures after inhalation

: If casualty is unconscious and:

if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Not breathing

Ensure that there is no obstruction to breathing and give artificial respiration by trained personnel.

If necessary, give external cardiac massage and obtain medical advice.

Breathing

Place in the recovery position.

Administer oxygen if necessary.

Obtain medical attention if casualty has an altered state of consciousness or if symptoms do not resolve.

First-aid measures after skin contact

: Remove contaminated clothing, contaminated footwear and dispose of safely.

Wash affected area with soap and water.

Do not wait for symptoms to develop.

Seek medical attention if skin irritation, swelling or redness develops and persists.

For minor thermal burns, cool the burn

Hold the burned area under cold running water for at least five minutes, or until the pain subsides.

Body hypothermia must be avoided.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do so

Continue rinsing

If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.

# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

First-aid measures after ingestion : in case of ingestion, always assume that aspiration has occurred.  
The casualty should be sent immediately to hospital  
Do not wait for symptoms to develop.  
Do not give anything by mouth to an unconscious person.  
Do not induce vomiting as there is high risk of aspiration.

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

Symptoms/injuries after inhalation : Inhalation of vapours may cause headache, nausea, vomiting and an altered state of consciousness.  
Symptoms/injuries after skin contact : Symptoms: reddening, irritation.  
Symptoms/injuries after eye contact : Slight eye irritation.  
Symptoms/injuries after ingestion : Ingestion (swallowing) of this material may result in an altered state of consciousness and loss of coordination.

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

No relevant data available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Foam (trained personnel only). Water fog (trained personnel only). Dry chemical powder. Carbon dioxide. Other inert gases (subject to regulations). Sand or earth.  
Unsuitable extinguishing media : Do not use direct water jets on the burning product; they could cause splattering and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

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

Reactivity : This substance is stable under all ordinary circumstances at ambient temperatures, and if released into the environment.

### 5.3. Advice for firefighters

Protection during firefighting : In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  
Other information : Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide. unidentified organic and inorganic compounds.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Protective equipment : Small spillages: normal antistatic working clothes are usually adequate.  
Large spillages: full body suit of chemically resistant and antistatic material.  
Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons.  
Work helmet.  
Antistatic non-skid safety shoes or boots  
Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated.  
Respiratory protection:  
a half or full-face respirator with filter(s) for organic vapours/H<sub>2</sub>S, or a Self-contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

Emergency procedures : Stop or contain leak at the source, if safe to do so  
Avoid direct contact with released material  
Stay upwind  
In case of large spillages, alert occupants in downwind areas.  
Keep non-involved personnel away from the area of spillage. Alert emergency personnel  
Except in case of small spillages,  
The feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency.  
Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares  
If required, notify relevant authorities according to all applicable regulations  
If necessary dike the product with dry earth, sand or similar non-combustible materials.  
Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation.  
Do not use direct jets  
When inside buildings or confined spaces, ensure adequate ventilation.

# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

### 6.1.2. For emergency responders

No relevant data available

### 6.2. Environmental precautions

Absorb spilled product with suitable non-combustible materials.

Prevent product from entering sewers, rivers or other bodies of water, or underground spaces (tunnels, cellars, etc.)

Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.

In case of soil contamination, remove contaminated soil and treat in accordance with local regulations.

In case of small spillages in closed waters, contain product with floating barriers or other equipment

Collect spilled product by absorbing with specific floating absorbents

If possible, large spillages in open waters should be contained with floating barriers or other mechanical means.

Contain spillage – ventilate area and allow to evaporate.

The use of dispersants should be advised by an expert, and, if required, approved by local authorities.

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

For containment : recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave/current direction and speed) may significantly influence the choice of appropriate actions  
For this reason, local experts should be consulted when necessary.  
Local regulations may also prescribe or limit actions to be taken.

### 6.4. Reference to other sections

No relevant data available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Risk of explosive mixtures of vapour and air. Ensure that all relevant regulations regarding explosive atmospheres, and handling and storage facilities of flammable products, are followed. Keep away from heat/sparks/open flames/hot surfaces. Do not eat, drink or smoke when using this product. Avoid contact with the hot product. Avoid release to the environment. Take precautionary measures against static electricity. Ground/bond containers, tanks and transfer/receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. The vapour is heavier than air. Beware of accumulation in pits and confined spaces. Do not use compressed air for filling, discharging, or handling operations. Avoid contact with skin and eyes. Do not ingest. Do not breathe vapours. Use adequate personal protective equipment as required. For more information regarding protective equipment and operational conditions see Exposure scenarios. Ensure that proper housekeeping measures are in place. Keep away from food and beverages. Wash the hands thoroughly after handling. Change contaminated clothes at the end of working shift.

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

Technical measures : Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content and flammability. Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability / explosion hazards. Open slowly in order to control possible pressure release. Empty containers may contain flammable product residues. Do not weld, solder, drill, cut or incinerate empty containers, unless they have been properly cleaned.

Storage conditions : Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: (strong) acids. (strong) bases. Halogens. heat sources. Oxidizing agents. Peroxides.

Storage area : Use and store only outdoors or in a well-ventilated area. Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Store separately from oxidising agents.

Special rules on packaging : If the product is supplied in containers: Keep only in the original container or in a suitable container for this kind of product. Keep containers tightly closed and properly labelled. Protect from the sunlight.

Packaging materials : Recommended materials: For containers, or container linings use materials specifically approved for use with this product. Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.

### 7.3. Specific end use(s)

Site documentation to support safe handling arrangements including the selection of engineering, administrative and personal protective equipment controls in accordance with risk-based management systems is available at each manufacturing site.

# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Toluene (108-88-3)		
EU	IOELV TWA (mg/m <sup>3</sup> )	384 mg/m <sup>3</sup>
EU	IOELV TWA (ppm)	100 ppm
EU	IOELV STEL (mg/m <sup>3</sup> )	192 mg/m <sup>3</sup>
EU	IOELV STEL (ppm)	50 ppm
Slovakia	NPEL (short term) (mg/m <sup>3</sup> )	384 mg/m <sup>3</sup>
Slovakia	NPEL (average) (mg/m <sup>3</sup> )	192 mg/m <sup>3</sup>
Slovakia	NPEL (average) (ppm)	50 ppm

Toluene (108-88-3)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	384 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	384 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	192 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	226 mg/m <sup>3</sup>
Acute - systemic effects, oral	8,13 mg/kg bodyweight
Long-term - systemic effects, inhalation	56,5 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	226 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,68 mg/l
PNEC aqua (marine water)	0,68 mg/l
PNEC aqua (intermittent, freshwater)	0,68 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	16,39 mg/kg dwt
PNEC (Soil)	
PNEC soil	2,89 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	13,61 mg/l

#### 8.2. Exposure controls

Appropriate engineering controls : Where hot product is handled in confined spaces, effective local ventilation must be provided.  
Personal protective equipment : Gloves. Protective goggles. Protective clothing. Gas mask with filter type A.



Hand protection : Wear chemically resistant gloves (tested to EN374) in combination with specific activity training. Gloves must be periodically inspected and changed in case of wear, perforations or contaminations.

Eye protection : If splashing is likely, full head and face protection (protective shield and/or safety goggles) should be used. If contact is likely, a protection (protective shield and/or safety goggles) should be used.

Skin and body protection : Wear suitable coveralls to prevent exposure to the skin. Coveralls should be changed at the end of the work shift and cleaned as necessary to avoid transfer of product to clothes or underwear.

Respiratory protection : to avoid respiratory tract irritation inhalation exposure should be kept to a minimum,. If exposure levels cannot be determined or estimated with adequate confidence, or an oxygen deficiency is possible, only SCBA's should be used. If necessary, approved respiratory protection equipment shall be used when handling hot product in confined spaces: enclosed face mask with cartridge/filter type "A" or self-contained breathing apparatus (SCBA). Change filter cartridge on respirator daily.

Thermal hazard protection : None in normal conditions.

Environmental exposure controls : Store finished products in closed containers (e.g., bulk tanks, drums, cans);. Store all VOC-containing wastes in closed, secure containers (e.g., bulk tanks, intermediate bulk containers, drums). Incinerate, absorb, or adsorb vapours stripped from solution whenever necessary. Use vapour recovery units when necessary. Carefully handle the substance to minimise releases.

Consumer exposure controls : Site documentation to support safe handling arrangements including the selection of engineering, administrative and personal protective equipment controls in accordance with risk-based management systems is available at each manufacturing site.

# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

### SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Colourless.
Odour	: aromatic odour.
Melting point	: - 95 °C
Boiling point	: 110,6 °C
Flash point	: 4,4 °C
Explosive limits (vol %)	: 1,3 - 6,7 vol %
Vapour pressure	: 28,4 kPa at 20°C
Density	: 867 kg/m <sup>3</sup> at 20°C
Water solubility	: 573 - 587 mg/l
Log Pow	: 2,73 at 20°C
Self ignition temperature	: 480 °C
Viscosity	: 0,56 mPa.s at 25°C

#### 9.2. Other information

The above data are informative, accurate physical-chemical data of the product are specified on the product certificate.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

This substance is stable under all ordinary circumstances at ambient temperatures, and if released into the environment.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.

#### 10.4. Conditions to avoid

They may be ignited by heat, sparks, static electricity or flames.

#### 10.5. Incompatible materials

A mixture with nitrates or other strong oxidisers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass.

#### 10.6. Hazardous decomposition products

No decomposition if stored normally.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Toluene (108-88-3)	
LD50 oral rat	5000 mg/kg
LD50 dermal rat	5000 mg/kg
LC50 inhalation rat (mg/l)	188 mg/m <sup>3</sup>

m-xylene; (108-38-3)	
ATE (dermal)	1100,000 mg/kg

p-xylene; (106-42-3)	
ATE (dermal)	1100,000 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation:	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: May be fatal if swallowed and enters airways.



# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 1515/830 (REACH)

### SECTION 12: Ecological information

#### 12.1. Toxicity

Toluene (108-88-3)	
LC50 fishes 1	5,5 mg/l
EC50 Daphnia 1	3,78 mg/l
EC50 other aquatic organisms 1	134 mg/l
LC50 fish 2	1,4 mg/l
LC50 other aquatic organisms 2	0,74 mg/l

#### 12.2. Persistence and degradability

Toluene (108-88-3)	
Persistence and degradability	Easily biodegradable (concerning to the criteria of the OECD).
Biochemical oxygen demand (BOD)	53 g O <sup>2</sup> /g substance

#### 12.3. Bioaccumulative potential

Toluene (108-88-3)	
BCF other aquatic organisms 1	16 - 90 low till middle bioconcentration in the aquatic organism
Bioconcentration factor (BCF REACH)	0
Log Pow	2,73 at 20°C

#### 12.4. Mobility in soil

Toluene (108-88-3)	
Mobility in soil	37 - 178 middle till high mobility in soil

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

Toluene (108-88-3)	
Results of PBT assessment	The substance is not considered a PBT/vPvB

#### 12.6. Other adverse effects

No relevant data available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Regional legislation (waste)	: DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives.
Waste treatment methods	: Contain and dispose of waste according to local regulations. External recovery and recycling of waste should comply with applicable local and/or national regulations. External treatment and disposal of waste should comply with applicable local and/or national regulations. Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended.
Sewage disposal recommendations	: Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Do not empty into drains; dispose of this material and its container in a safe way.
Waste disposal recommendations	: Clear up spills immediately and dispose of waste safely. Dispose of waste or used sacks/containers according to local regulations.
Additional information	: (*) Hazardous waste according to Directive 91/689/EEC. European Waste Catalogue code(s) (Decision 2001/118/CE): The final user has the responsibility for the attribution of the most suitable code, according to the actual use(s) of the material, contaminations or alterations.
Ecology - waste materials	: Avoid any discharge of the product into waste water. Disposal in high-temperature incinerator (> 1200 °C).
EWC (EURAL) code	: 15 01 10* - packaging containing residues of or contaminated by dangerous substances, 16 03 05* - organic wastes containing dangerous substances

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN





ADR	RID	ADN	IMDG	IATA
<b>14.1. UN number</b>				
1294	1294	1294	1294	1294
<b>14.2. UN proper shipping name</b>				
TOLUENE	TOLUENE	TOLUENE	TOLUENE	TOLUENE
<b>Transport document description</b>				
UN 1294 TOLUENE, 3, II (D/E)	UN 1294 TOLUENE, 3, II	UN 1294 TOLUENE, 3(N3), II	UN 1294 TOLUENE, class 3, II	UN 1294 TOLUENE, 3, II
<b>14.3. Transport hazard class(es)</b>				
3	3	3	3	3



# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

ADR	RID	ADN	IMDG	IATA
				
<b>14.4. Packing group</b>				
II	II	II	II	II
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
<b>14.6. Classification code :</b>				
F1	F1	F1		
<b>14.7. Hazard identification number (Kemler No.)</b>				
33	33			
<b>14.8. Additional information</b>				
Tunnel restriction code (ADR) : D/E		Number of blue cones/lights (ADN) : 1	EmS-No. (Fire) : F - E EmS-No. (Spillage) : S - D	PCA packing instructions (IATA) : 353 CAO packing instructions (IATA) : 364
No supplementary information available				

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Authorisations and/or restrictions on use (Annex XVII):

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Toluene - toluene - benzene - ethylbenzene - o-Xylene - m-xylene; - p-xylene;
5. Benzene	benzene
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	Toluene - toluene - benzene - ethylbenzene - o-Xylene - m-xylene; - p-xylene;
48. Toluene	Toluene - toluene

#### 15.1.2. National regulations

Regional legislation

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP), REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), COMMISSION REGULATION (EU) No 605/2014 of 5 June 2014 amending, for the purposes of introducing hazard and precautionary statements in the Croatian language and its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, COMMISSION REGULATION (EU) 2015/830 of 28 May 2015, amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

### 15.2. Chemical safety assessment

Chemical Safety Assessment : For this substance a chemical safety assessment has been carried out.

## SECTION 16: Other information

SDS changed items : Update data in sections 7.1  
Data sources : LOA registration dossier.  
Training advice : Before handling, storing or using the present substance for the first time, employees must be informed.

Full text of H- and EUH-phrases::

Acute Tox. 4 (Dermal)	Acute toxicity (Dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (Inhalation) Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A

# Toluene

## Safety Data Sheet

according to Regulation (EC) No. 2015/830 (REACH)

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Muta. 1B	Germ cell mutagenicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin Corrosion/Irritation Category 2
STOT RE 1	Specific target organ toxicity — repeated exposure Category 1
STOT RE 2	Specific target organ toxicity — repeated exposure Category 2
STOT SE 3	Specific target organ toxicity — single exposure Category 3
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H361d	Suspected of damaging the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure (hearing organs)

### Precautionary statements (CLP):

P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P243	Take precautionary measures against static discharge
P260	Do not breathe fume, mist, spray
P280	Wear eye protection, face protection, protective clothing, protective gloves
P301+P310	If swallowed, immediately call a doctor.
P331	Do NOT induce vomiting
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P308+P313	IF exposed or concerned: Get medical advice/attention

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*