



## SAFETY DATA SHEET

According to the Hazard Communication Standard, 29 CFR 1910.1200

# TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

### 1. IDENTIFICATION

#### Product identifier

Product name TOLUENE

#### Other means of identification

Trade name TOLUENE  
Substance/mixture Substance

#### Recommended use of the chemical and restrictions on use

**Identified uses** Manufacture of substances. Use as an intermediate. Distribution of substance. Formulation & (re)packing of substances and mixtures. Uses in Coatings. Use as a fuel. Functional Fluids. Road and construction applications. Laboratory activities. Polymer processing. Rubber production and processing.

**Uses advised against** Do not use for any purpose other than the one for which it is intended

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

**Supplier Address** The Chemical Supply  
9595 Six Pines Drive  
Suite 8210  
The Woodlands, TX 77380

**E-mail Address** info@thechemicalsupply.com

**Emergency telephone number**  
**Emergency telephone** 1-800-424-9300 (CHEMTREC 24/7 Domestic)  
1-703-527-3887 (CHEMTREC 24/7 International)

### 2. HAZARDS IDENTIFICATION

#### Classification

Flammable liquids - Category 2  
Skin corrosion/irritation - Category 2  
Serious eye damage/eye irritation - Category 2A  
Germ Cell Mutagenicity - Category 1B  
Carcinogenicity - Category 1A  
Reproductive toxicity - Category 2  
Specific target organ systemic toxicity (single exposure) - Category 2  
Specific target organ systemic toxicity (repeated exposure) - Category 1

## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

Aspiration toxicity - Category 1

### Label elements



### **DANGER**

#### **Hazard Statements**

Highly flammable liquid and vapor  
 May be fatal if swallowed and enters airways  
 May cause cancer  
 May cause genetic defects  
 Suspected of damaging fertility or the unborn child  
 Causes skin irritation  
 Causes serious eye irritation  
 May cause respiratory irritation  
 May cause drowsiness or dizziness  
 May cause damage to organs  
 May cause damage to organs through prolonged or repeated exposure

#### **Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Wash face, hands and any exposed skin thoroughly after handling  
 Ground/bond container and receiving equipment  
 Use only non-sparking tools  
 Use explosion-proof electrical/ ventilating / lighting equipment  
 Take precautionary measures against static discharge  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Wash hands and face thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Use personal protective equipment as required

#### **Precautionary Statements - Response**

Specific treatment (see Section 4.1 of SDS or information on this label)  
 IF exposed or concerned: Get medical advice/attention

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor/physician

#### **Skin**

If skin irritation occurs: Get medical advice/attention



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse

### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Immediately call a POISON CENTER or doctor/physician

### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting

### Fire

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

### Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool  
Store locked up

### Precautionary Statements - Disposal

Dispose of contents/ container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

### Other information

#### Physical-Chemical Properties

The material can accumulate static charge and can therefore cause electrical ignition.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Substance

Chemical Name	CAS No.	Weight-%
Toluene	108-88-3	100

Chemical Name	CAS No.	Weight-%
Benzene	71-43-2	<1.1

\* The exact percentage (concentration) of composition has been withheld as a trade secret

## 4. FIRST AID MEASURES

### First aid measures for different exposure routes

#### General advice

Immediate medical attention is required. Show this material safety data sheet to the doctor in attendance. If symptoms persist, call a physician. IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

#### Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

<b>Skin contact</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water. Immediate medical attention is not required. Remove contaminated clothing and shoes. Wash off with soap and water.
<b>Inhalation</b>	Immediate medical attention is required. If not breathing, give artificial respiration. Move to fresh air. Move to fresh air in case of accidental inhalation of vapors. Immediate medical attention is not required. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
<b>Ingestion</b>	Do NOT induce vomiting. Immediate medical attention is required. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water. Do not induce vomiting without medical advice. Consult a physician. If swallowed, do not induce vomiting - seek medical advice.
<b>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

### Most important symptoms/effects, acute and delayed

<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Inhalation</b>	Harmful if inhaled. Vapors inhaled in strong concentration have a narcotic effect on the central nervous system. May cause drowsiness and dizziness. May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
<b>Ingestion</b>	If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions (medical survey during 48 hours). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Symptoms</b>	Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. May cause headache and dizziness. Disorientation. Itching. Difficulty breathing. Coughing and/ or wheezing. Skin irritation.

### Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	Treat symptomatically.
---------------------------	------------------------

## **5. FIRE-FIGHTING MEASURES**

<b><u>Suitable Extinguishing Media</u></b>	Foam. Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray. Sand.
<b>Uniform Fire Code</b>	Flammable Liquid: I-B Irritant: Liquid Other Health Hazard: Target Organ Toxin--Liquid Other Health Hazard: Carcinogen--Liquid (Note 5) Highly Toxic: Liquid Blasting Agents



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b><u>Special Hazard</u></b>	Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Flash back possible over considerable distance. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.
<b><u>Explosion Data</u></b>	
<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	May be ignited by friction, heat, sparks or flames.
<b><u>Protective Equipment and Precautions for Firefighters</u></b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel.

### 6. ACCIDENTAL RELEASE MEASURES

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

<b>General Information</b>	Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Heat, flames and sparks. Ensure adequate ventilation.
<b>Other information</b>	See Section 12 for additional information.

#### Environmental precautions

<b>General Information</b>	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained. Try to prevent the material from entering drains or water courses. Prevention of fire and explosion. A vapor suppressing foam may be used to reduce vapors. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. See Section 12 for additional Ecological Information.
----------------------------	--

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

<b>Methods for cleaning up</b>	Dam up. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Ground and bond containers when transferring material. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal. Use mechanical means such as pumps, skimmers and absorbent materials. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.
--------------------------------	--

### 7. HANDLING AND STORAGE

## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

### Precautions for safe handling

#### Advice on safe handling

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Prevent the formation of vapors, mists and aerosols. When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. There is a hazard associated with rags, paper or any other material used to remove spills which become soaked with product. Avoid accumulation of these: they are to be disposed off safely after use. Avoid static electricity build up with connection to earth.

#### Prevention of fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems). OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION). Do not use compressed air for filling, discharging or handling. Empty containers may contain flammable or explosive vapors.

#### Hygiene measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Avoid breathing vapors, mist or gas.

### Conditions for safe storage, including any incompatibilities

#### Technical measures/Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

#### Packaging material

Unlined steel. Stainless steel.

#### Materials to Avoid

Strong oxidizing agents. Strong acids. Bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Toluene 108-88-3	TWA 20 ppm	TWA: 200 ppm() (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m <sup>3</sup> Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m <sup>3</sup> STEL: 150 ppm STEL: 560 mg/m <sup>3</sup>

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Benzene	S*	TWA: 10 ppm()	IDLH: 500 ppm



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

71-43-2	STEL 2.5 ppm TWA 0.5 ppm	TWA: 1 ppm() (vacated) TWA: 10 ppm (vacated) STEL: 50 ppm (vacated) Ceiling: 25 ppm Ceiling: 25 ppm STEL: 5 ppm	TWA: 0.1 ppm STEL: 1 ppm
---------	-----------------------------	--	-----------------------------

### Biological standards

Chemical Name	ACGIH
Toluene 108-88-3	Toluene in blood 0.02 mg/L -prior to last shift of workweek Toluene in urine 0.03 mg/L -end of shift o-Cresol with hydrolysis in urine 0.3 mg/g creatinine -end of shift

Chemical Name	ACGIH
Benzene 71-43-2	S-Phenylmercapturic acid in urine 25 µg/g creatinine -end of shift t,t-Muconic acid in urine 500 µg/g creatinine -end of shift

### Exposure controls

#### Engineering Measures

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

### Individual protection measures, such as personal protective equipment

#### General Information

These recommendations apply to the product as supplied. If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

#### Eye/face protection

If splashes are likely to occur, wear: Safety glasses with side-shields.

#### Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.

#### Hand Protection

Protective gloves.

#### Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

#### Hygiene measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Regular cleaning of equipment, work area and clothing is recommended. Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Wash hands with water as a precaution. Avoid breathing vapors, mist or gas.

## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Physical and chemical properties

Color	clear colorless
Physical State @20°C	liquid
Odor	Characteristic
Odor Threshold	2.5 ppm

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
Melting point/range	-95 °C -139 °F		
Boiling point/boiling range	<b>110 °C</b> 230 °F		
Flash point	<b>4 °C</b> 39 °F		Closed cup Closed cup.
Evaporation rate	2.2	nBuAc=1	
Flammability Limits in Air			
upper	7.1 %		
Lower	1.1 %		
Vapor Pressure	3.3 kPa @ 25 °C		
Vapor density	3.1	(Air = 1)	
Relative density	0.87		
Density	870 kg/m <sup>3</sup>		
Water solubility	51 mg/l	@ 20 °C	
Solubility in other solvents		No information available	
logPow		No information available	
Autoignition temperature	<b>480 °C</b> 896 °F		
Decomposition temperature		No information available	
Viscosity, kinematic	< 20.5 mm <sup>2</sup> /s	@ 40 °C	
Explosive properties	Not explosive		
Oxidizing Properties	Not applicable		
Possibility of hazardous reactions	Not applicable		
<u>Other information</u>			
Critical Temperature	<b>319 °C</b> 606 °F		
Specific Gravity			
Molecular Weight			
Freezing Point	-95 °C -139 °F		

### 10. STABILITY AND REACTIVITY

Reactivity None under normal processing.

Chemical stability Stable under recommended storage conditions.





## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

<b><u>Possibility of hazardous reactions</u></b>	None under normal processing.
<b><u>Conditions to avoid</u></b>	Heat, flames and sparks. Heating in air. Take precautionary measures against static discharges.
<b><u>Incompatible materials</u></b>	Strong oxidizing agents. Strong acids. Bases.
<b><u>Hazardous Decomposition Products</u></b>	Carbon oxides. Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

<b>Principle Routes of Exposure</b>	Inhalation, Ingestion, Eye contact, Skin contact.
<b>Symptoms</b>	Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. May cause headache and dizziness. Disorientation. Itching. Difficulty breathing. Coughing and/ or wheezing. Skin irritation.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Inhalation</b>	Harmful if inhaled. Vapors inhaled in strong concentration have a narcotic effect on the central nervous system. May cause drowsiness and dizziness. May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.
<b>Ingestion</b>	If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions (medical survey during 48 hours). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

##### Acute toxicity - Product Information

<b>Product Information</b>	Product does not present an acute toxicity hazard based on known or supplied information.
<b>Oral</b>	Not classified.
<b>Dermal</b>	Not classified
<b>Inhalation</b>	May be harmful if inhaled

##### Acute toxicity - Component Information



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Toluene 108-88-3	5580 mg/kg bw (rat)	> 5000 mg/kg bw (rabbit)	28.1 mg/L (Rat-vapour) 4h

<b>Skin corrosion/irritation</b>	Irritating to skin.
<b>Serious eye damage/eye irritation</b>	Risk of serious damage to eyes.
<b>Sensitization</b>	Not classified as a sensitizer.
<b>Carcinogenicity</b>	May cause cancer. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Benzene 71-43-2	A1	1	Known	X

**ACGIH: (American Conference of Governmental Industrial Hygienists)** A1 - Known Human Carcinogen

**IARC: (International Agency for Research on Cancer)** Group 1 - Carcinogenic to Humans

**NTP: (National Toxicity Program)** Known - Known Carcinogen

**OSHA: (Occupational Safety & Health Administration)** X - Present

<b>Mutagenicity</b>	May cause genetic defects.
<b>Reproductive toxicity</b>	Suspected of damaging fertility or the unborn child.
<b>Target Organ Effects (STOT)</b>	Kidney. Blood. Bone marrow. Immune system. Eyes. Ears. Central nervous system (CNS).
<b>STOT - single exposure</b>	May cause respiratory irritation. May cause drowsiness or dizziness. May cause disorder and damage to the. Immune system.
<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure: Eyes, Ears, Central nervous system, Kidney, Blood, Bone marrow.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Harmful to aquatic life with long lasting effects

#### Acute aquatic toxicity - Product Information

Not applicable

#### Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to microorganisms
Toluene 108-88-3	EC50 (3 h): 134 mg/l Chlorella vulgaris	LC50 (96h) 5.5mg/l Oncorhynchus kisutch	EC50 (48h) 3.78mg/l Daphnia magna	EC50 = 19.7 mg/L 30 min

#### Chronic aquatic toxicity - Product Information

Not applicable

#### Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and	Toxicity to fish	Toxicity to
---------------	-------------------	-------------------------	------------------	-------------



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

		other aquatic invertebrates		microorganisms
Toluene 108-88-3	NOEC(72h) 10 mg/l Skeletonema costatum		NOEC (40d) 1.39 mg/l Oncorhynchus kisutch LOEC (40d) 2.77 mg/l Oncorhynchus kisutch	

**Effects on terrestrial organisms** No experimental data available .

### Persistence and degradability

**General Information** No information available.

### Bioaccumulative potential

**Product Information** No information available.

**logPow** No information available

### Component Information

Chemical Name	log Pow
Toluene 108-88-3	2.73

### Mobility

**Soil** No information available

### Other adverse effects

**General Information** No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment

**Waste Disposal Methods** Should not be released into the environment. Dispose of in accordance with local regulations. This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated packaging** Empty containers may contain flammable or explosive vapors. Do not burn, or use a cutting torch on, the empty drum. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**US EPA Waste Number** D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Benzene 71-43-2	U019	Included in waste streams: F005, F024, F025, F037, F038, F039, K085, K104, K105, K141, K142, K143,	0.5 mg/L regulatory level	ignitable waste, toxic waste



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

		K144, K145, K147, K151, K159, K169, K171, K172		
--	--	---	--	--

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Toluene 108-88-3	Toxic Ignitable

Chemical Name	California Hazardous Waste Status
Benzene 71-43-2	Toxic Ignitable

### 14. TRANSPORT INFORMATION

#### DOT

**UN/ID No** UN1294  
**Proper shipping name** TOLUENE  
**Hazard class** 3  
**Packing Group** II  
**Special Provisions** IB2, T4, TP1  
**Description** UN1294, TOLUENE, 3, II  
**Emergency Response Guide Number** 130

#### TDG

**UN/ID No** UN1294  
**Proper shipping name** TOLUENE  
**Hazard class** 3  
**Packing Group** II  
**Description** UN1294, TOLUENE, 3, II

#### MEX

**UN/ID No** UN1294  
**Proper shipping name** TOLUENE  
**Hazard class** 3  
**Packing Group** II  
**Description** UN1294, TOLUENE, 3, II

#### ICAO/IATA

**UN/ID No** UN1294  
**Proper shipping name** Toluene  
**Hazard class** 3  
**Packing Group** II  
**ERG Code** 3L  
**Description** UN1294, Toluene, 3, II  
**Excepted Quantity** E2  
**Limited quantity** 1 L



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

### IMDG/IMO

UN/ID No	UN1294
Proper shipping name	Toluene
Hazard class	3
Packing Group	II
EmS No.	F-E, S-D
Description	UN1294, Toluene, 3, II, (4°C c.c.)
Excepted Quantity	E2
Limited quantity	1 L

### ADR/RID

UN/ID No	UN1294
Proper shipping name	TOLUENE
Hazard class	3
Packing Group	II
Classification Code	F1
Tunnel Restriction Code	(D/E)
Description	UN1294, TOLUENE, 3, II, (D/E)
Limited quantity	1 L

### ADN

UN/ID No	UN1294
Proper shipping name	TOLUENE
Hazard class	3
Packing Group	II
Classification Code	F1
Description	UN1294, TOLUENE, 3, II
Hazard Labels	3
Limited quantity	1 L
Ventilation	VE01

## 15. REGULATORY INFORMATION

<b>International Inventories</b>	The substance is listed or exempted from listing in the following inventories: U.S.A. (TSCA) Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) Korea (KECL) China (IECSC) Japan (ENCS) Philippines (PICCS) New Zealand (NZIoC)
----------------------------------	---

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Toluene	108-88-3	100	1.0



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

Benzene	71-43-2	<1.1	0.1
---------	---------	------	-----

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Benzene	71-43-2	<1.1	0.1

### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

### Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3	1000 lb	X	X	X

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Benzene 71-43-2	10 lb	X	X	X

### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

Chemical Name	CAS No.	Weight-%	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Toluene	108-88-3	100		Group I		

Chemical Name	CAS No.	Weight-%	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Benzene	71-43-2	<1.1		Group I		

### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Toluene	1000 lb	

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Benzene	10 lb	

## U.S. State Regulations

### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	Weight-%	California Prop. 65
---------------	----------	---------------------



## TOLUENE NG

Date of the previous version: 2016-04-13

Revision Date: 2017-10-25

Version 1.01

Toluene - 108-88-3	> 97	Developmental
Benzene - 71-43-2	0.1 - 1.1	Carcinogen Developmental Male Reproductive

Chemical Name	Weight-%	California Prop. 65
Benzene - 71-43-2	<1.1	Carcinogen Developmental Male Reproductive

### U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois
Toluene 108-88-3	X	X	X	X
Benzene 71-43-2	X	X	X	X

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois
Benzene 71-43-2	X	X	X	X

## 16. OTHER INFORMATION

<b>NFPA</b>	<b>Health Hazard</b> 2	<b>Flammability</b> 3	<b>Instability</b> 0	<b>Special hazards</b> *
<b>HMIS</b>	<b>Health Hazard</b> 2*	<b>Flammability</b> 3	<b>Physical Hazard</b> 0	<b>Personal protection</b> X

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Hazards are split into categories each with a 0 to 4 rating, 0 meaning no hazard and 4 meaning high hazard

**Revision Date:** 2017-10-25  
**Revision Note** (M)SDS sections updated 1

#### Abbreviations, acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

bw = body weight

bw/day = body weight/day

EC x = Effect Concentration associated with x% response

GLP = Good Laboratory Practice

IARC = International Agency for Research of Cancer

LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals

LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals

LL = Lethal Loading

NIOSH = National Institute of Occupational Safety and Health

NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

NOEL = No Observed Effect Level

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

#### Legend



---

## TOLUENE NG

**Date of the previous version:** 2016-04-13

**Revision Date:** 2017-10-25

**Version** 1.01

---

### Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH - National Institute for Occupational Safety and Health

TLV - Threshold Limit Values

PEL - Permissible Exposure Limits

IDHL - Immediately Dangerous to Life or Health concentrations

TWA - Time Weight Average

STEL - Short Term Exposure Limits

S\* - Skin notation

TSCA - Toxic Substance Control Act

---

**This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.**

**End of the Safety Data Sheet**