

SAFETY DATA SHEET TOLUENE

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	TOLUENE
Product No.	STTO0043, TO0043, TO0182, TO0172, TO0171, TO0194, TO0251, TO0271, TO0253, TO0243
Synonyms, Trade Names	PHENYL METHANE, TOLUOL, METHYL BENZENE, MX THINNER A214, MX-THINNER 3
REACH Registration number	01-2119471310-51
CAS-No.	108-88-3
EU Index No.	601-021-00-3
EC No.	203-625-9

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

Identified uses Printing ink. Adhesive.

1.3. Details of the supplier of the safety data sheet

Supplier IBS BOAT SUPPLIES
Fambridge Yacht Station,
Ferry Road,
North Fambridge,
Chelmsford CM3 6LS
United Kingdom

+44 1621 744250
sales@ibs-boats.com

1.4. Emergency telephone number

Emergency Contact Number (Office Hours) +44 1493 850 303
Emergency Contact Number (Outside Office Hours) +44 1493 850 303
Sds No. 370

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	Skin Irrit. 2 - H315; Repr. 2 - H361d; STOT Single 3 - H336; STOT Rep. 2 - H373; Asp. Tox. 1 - H304
Environment	Not classified.

Classification (67/548/EEC) F; R11 Repr. Cat. 3; R63 Xn; R48/20, R65 Xi; R38 R67

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

EC No. 203-625-9
Label In Accordance With (EC) No. 1272/2008

TOLUENE



Signal Word	Danger	
Hazard Statements	H225	Highly flammable liquid and vapour.
	H304	May be 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 through prolonged or repeated exposure.
Precautionary Statements	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.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product name	TOLUENE
REACH Registration number	01-2119471310-51
CAS-No.	108-88-3
EU Index No.	601-021-00-3
EC No.	203-625-9

Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention.

Ingestion

Provide rest, warmth and fresh air. Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention immediately!

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

TOLUENE

Inhalation.

May cause unconsciousness, blindness and possibly death. Drowsiness, dizziness, disorientation, vertigo.

Ingestion

Pulmonary oedema, frothy sputum. Nausea, vomiting. Diarrhoea.

Skin contact

Skin irritation.

Eye contact

Irritation of eyes and mucous membranes.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

HIGHLY FLAMMABLE!

Specific hazards

Oxides of: Carbon.

5.3. Advice for firefighters

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Take precautionary measures against static discharges. Provide adequate ventilation.

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Absorb with inert, damp, non-combustible material, then flush area with water. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Avoid inhalation of vapours and spray mists. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed. Keep in original container. Keep away from heat, sparks and open flame.

Storage Class

Flammable liquid storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

TOLUENE

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
TOLUENE		50	191	100	384	

mg/m³(Sk)

DNEL	Industry	Inhalation.	Short Term	384 mg/m ³
DNEL	Industry	Inhalation.	Long Term	192 mg/m ³
DNEL	Industry	Dermal	Long Term	384 mg/kg/day
DNEL	Consumer	Inhalation.	Short Term	226 mg/m ³
DNEL	Consumer	Inhalation.	Long Term	56.5 mg/m ³
DNEL	Consumer	Oral	Long Term	813 mg/kg/day
DNEL	Consumer	Dermal	Long Term	226 mg/kg/day
PNEC	Water	0.68	mg/l	
PNEC	Sediment	16.39	mg/l	
PNEC	Soil	2.89	mg/l	
PNEC	STP	1361	mg/l	

8.2. Exposure controls

Protective equipment



Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Nitrile gloves are recommended.

Eye protection

Wear approved safety goggles.

Other Protection

Wear rubber apron. Wear rubber footwear.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Odour	Aromatic. Hydrocarbon.
Solubility	Slightly soluble in water.
Initial boiling point and boiling range	110 - 111
Melting point (°C)	-95
Bulk Density	871 kg/m ³
Vapour density (air=1)	3.1
Vapour pressure	3.0 -3.5 kPa @ 20
Evaporation rate	6.1
Flash point (°C)	4
Auto Ignition Temperature (°C)	480 - 536
Flammability Limit - Lower(%)	1.2
Flammability Limit - Upper(%)	8
Partition Coefficient (N-Octanol/Water)	2.65

TOLUENE

9.2. Other information

Mol. Weight 92

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Oxides of: Carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50 2500-7500 mg/kg (oral rat)

Toxic Conc. - LC 50 4000 ppm/4h (inh-rat)

Other Health Effects

Toxic to Reproductive Health Category 3.

Acute Toxicity (Inhalation LC50) < 20 mg/l (vapours) Rat 4 hours

Inhalation

Harmful: danger of serious damage to health by prolonged exposure through inhalation. Vapours may cause drowsiness and dizziness.

Ingestion

Harmful: may cause lung damage if swallowed.

Skin contact

Irritating to skin.

Eye contact

Irritating to eyes.

Target Organs

Liver Kidneys Central nervous system

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Acute Toxicity - Fish LC50 96 hours 5.5 mg/l

Acute Toxicity - Aquatic Invertebrates EC50 48 hours 3.78 mg/l

Acute Toxicity - Aquatic Plants EC50 72 hours 10 mg/l

12.2. Persistence and degradability

Degradability

The product is biodegradable.

12.3. Bioaccumulative potential

TOLUENE

Bioaccumulative potential

The product is not bioaccumulating.

Bioaccumulation factor BCF 90

Partition Coefficient Partition coefficient (n-octanol/water): 2.65

12.4. Mobility in soil

Mobility:

The product is partly miscible with water and may spread in the aquatic environment.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority. Do not puncture or incinerate even when empty. Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General Full protective clothing should be worn when handling this product.

14.1. UN number

Un Number Road 1294
UN No. (IMDG) 1294
UN No. (ICAO) 1294

14.2. UN proper shipping name

Proper Shipping Name TOLUENE

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3
ADR/RID/ADN Class Class 3: Flammable liquids.
ADR Label No. 3
IMDG Class 3
ICAO Class/Division 3
Transport Labels



14.4. Packing group

ADR/RID/ADN Packing group II
IMDG Packing group II
ICAO Packing group II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

TOLUENE

14.6. Special precautions for user

EMS	F-E, S-D
Emergency Action Code	3YE
Hazard No. (ADR)	33
Tunnel Restriction Code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. DSEAR

Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

Inventory Information

EINECS TSCA DSL ENCS IECS KECL PICCS NZIOC AICS

SECTION 16: OTHER INFORMATION

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date	21.07.2011
Revision	02
SDS No.	370
Safety Data Sheet Status	Approved.
Date	24.09.2010
Signature	IBS Boat Supplies

Risk Phrases In Full

R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R38	Irritating to skin.
R63	Possible risk of harm to the unborn child.
R67	Vapours may cause drowsiness and dizziness.

TOLUENE

Hazard Statements In Full

H315	Causes skin irritation.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.