



SAFETY DATA SHEET

TOLUENE FREE SOLVENT

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

1.1. Product identifier

Product name	Toluene Free Solvent
Product number	203116-203119
REACH registration number	01-2119475103-46-0017
CAS number	141-78-6
EU index number	607-022-00-5
EC number	205-500-4

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

Identified uses	Etchant/cleaner.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier	IBS BOAT SUPPLIES FERRY RD N FAMBRIDGE ESSEX CM3 6LS T: +44 (0) 1621 744250 F: +44 (0) 1621 744570 E: info@ibs-boats.com
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1.4. Emergency telephone number

Emergency telephone	+44 01621 744250 (NOT 24HRS)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards	Not Classified
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Classification (67/548/EEC or 1999/45/EC)	F;R11 Xi;R36 R66 R67
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2.2. Label elements

EC number	205-500-4
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Pictogram



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents/container in accordance with national regulations.

Contains

ETHYL ACETATE

Supplementary precautionary statements

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing vapour/spray.

P264 Wash contaminated skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHYL ACETATE			60-100%
CAS number: 141-78-	EC number: 205-500-	REACH registration number: 01-2119475103-46-0017	
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H310 STOT SE 3 -		Classification (67/548/EEC or 1999/45/EC)	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination.
Inhalation	Move affected person to fresh air at once.
Ingestion	DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapours may cause drowsiness and dizziness. Irritation of nose, throat and airway.
Ingestion	May cause chemical burns in mouth and throat.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	Severe irritation, burning and tearing.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	The product is flammable. Heating may generate flammable vapours. The product is highly flammable.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material.
Special protective equipment for firefighters	Wear chemical protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb spillage with non-combustible, absorbent material.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Eliminate all sources of ignition. Vapours may accumulate on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented. Avoid inhalation of vapours and spray/mists.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Keep away from heat, sparks and open flame. Store in closed original container at temperatures between 5°C and 25°C.
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Storage class	Flammable liquid storage.
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7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

~~Occupational exposure limits~~

Long-term exposure limit (8-hour TWA): WEL 200 ppm

Short-term exposure limit (15-minute): WEL 400 ppm

ETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm

Short-term exposure limit (15-minute): WEL 400 ppm

WEL = Workplace Exposure Limit

DNEL	Workers - Inhalation; Short term systemic effects: 1468 mg/m ³
	Workers - Inhalation; Short term local effects: 1468 mg/m ³
	Consumer - Inhalation; Short term systemic effects: 734 mg/m ³
	Consumer - Inhalation; Short term local effects: 374 mg/m ³
	Workers - Inhalation; Long term local effects: 734 mg/m ³
	Workers - Dermal; Long term systemic effects: 63 mg/kg bw/day
	Workers - Inhalation; Long term systemic effects: 734 mg/m ³
	Consumer - Dermal; Long term systemic effects: 37 mg/kg bw/day
	Consumer - Inhalation; Long term systemic effects: 367 mg/m ³
	Consumer - Oral; Long term systemic effects: 4.5 mg/kg bw/day

Consumer - Inhalation; Long term local effects: 367 mg/m³

PNEC

- Fresh water; 0.26 mg/l
- Marine water; 0.026 mg/l
- Intermittent release; 1.65 mg/l
- Sediment (Freshwater); 1.25 mg/kg
- Sediment (Marinewater); 0.125 mg/kg
- Soil; 0.24 mg/kg
- STP; 650 mg/l

ETHYL ACETATE (CAS: 141-78-6)

DNEL

Workers - Inhalation; Short term systemic effects: 1468 mg/m³
 Workers - Inhalation; Short term local effects: 1468 mg/m³
 Consumer - Inhalation; Short term systemic effects: 734 mg/m³
 Consumer - Inhalation; Short term local effects: 374 mg/m³
 Workers - Inhalation; Long term local effects: 734 mg/m³
 Workers - Dermal; Long term systemic effects: 63 mg/kg bw/day
 Workers - Inhalation; Long term systemic effects: 734 mg/m³
 Consumer - Dermal; Long term systemic effects: 37 mg/kg bw/day
 Consumer - Inhalation; Long term systemic effects: 367 mg/m³
 Consumer - Oral; Long term systemic effects: 4.5 mg/kg bw/day
 Consumer - Inhalation; Long term local effects: 367 mg/m³

PNEC

- Fresh water; 0.26 mg/l
 - Marine water; 0.026 mg/l
 - Intermittent release; 1.65 mg/l
 - Sediment (Freshwater); 1.25 mg/kg
 - Sediment (Marinewater); 0.125 mg/kg
 - Soil; 0.24 mg/kg
 - STP; 650 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. For exposure up to 8 hours, wear gloves made of the following material: Viton rubber (fluoro rubber).

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination.
 Wear apron or protective clothing in case of contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Wash hands after handling.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls

Keep container tightly sealed when not in use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Fruity.
Odour threshold	Not available.
pH	Not available.

Melting point	-84°C
Initial boiling point and range	76°C @
Flash point	-4°C CC (Closed cup).
Evaporation rate	very fast
Evaporation factor	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	: 2-11.5%
Other flammability	Not available.
Vapour pressure	98hPa @ °C
Vapour density	>1 g/cm ³
Relative density	0.9003 g/cm ³ @ 20°C
Bulk density	Not available.
Solubility(ies)	Insoluble in water.
Partition coefficient	Not available.
Auto-ignition temperature	427°C
Decomposition Temperature	Not available.
Viscosity	Kinematic viscosity ≤ 20.5 mm ² /s.
Explosive properties	Not available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not available.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	No information required.
Refractive index	Not available.
Particle size	Not available.
Molecular weight	Not available.
Volatility	Not available.
Saturation concentration	Not available.

Critical temperature Not available.

Volatile organic compound This product contains a maximum VOC content of 903 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of Not applicable.
hazardous reactions

10.4. Conditions to avoid

Conditions to avoid Avoid contact with strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Acids - oxidising. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition Does not decompose when used and stored as recommended.
products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information on ingredients:

ETHYL ACETATE

Acute toxicity - oral

Acute toxicity oral 4,100.0
(LD₅₀ mg/kg)

Species Mouse

ATE oral (mg/kg) 4,100.0

Acute toxicity - dermal

Acute toxicity dermal 20,000.0
(LD₅₀ mg/kg)

Species Rabbit

ATE dermal (mg/kg) 20,000.0

Acute toxicity - inhalation

Acute toxicity 30.0
inhalation (LC₅₀
vapours mg/l)

Species Rat

ATE inhalation 30.0
(vapours mg/l)

SECTION 12: Ecological Information

12.1. Toxicity

Acute toxicity - fish	EC ₅₀ , 48 hours: 610 mg/l, Fish
	LC ₅₀ , 96 hours: 230 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 11.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 48 hours: 5600 mg/l, Algae

Ecological information on ingredients.

ETHYL ACETATE

Acute toxicity - fish	EC ₅₀ , 48 hours: 610 mg/l, Fish LC ₅₀ , 96 hours: 230 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 11.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 48 hours: 5600 mg/l, Algae

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulative potential	BCF: 30,
Partition coefficient	Not available.

Ecological information on ingredients.

ETHYL ACETATE

Bioaccumulative potential	BCF: 30,
Partition coefficient	Not available.

12.4. Mobility in soil

Mobility	The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.
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Ecological information on ingredients.

ETHYL ACETATE

Mobility	The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
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Ecological information on ingredients.

ETHYL ACETATE

Results of PBT and	vPvB assessment
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This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not known.

Ecological information on ingredients.

ETHYL ACETATE

Other adverse effects Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1173
UN No. (IMDG)	1173
UN No. (ICAO)	1173
UN No. (ADN)	1173

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ETHYL ACETATE

Proper shipping name (IMDG) ETHYL ACETATE

Proper shipping name (ICAO) ETHYL ACETATE

Proper shipping name (ADN) ETHYL ACETATE

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

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

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	2
Emergency Action Code	•3YE
Hazard Identification Number 33 (ADR/RID)	
Tunnel restriction code	(D/E)

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

SECTION 15: Regulatory information

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

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) (as amended).
Restrictions (Title VIII Regulation 1907/2006)	not to be sold to the general public above 0.1%
Water hazard classification	WGK 2

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by	Compliance
Revision date	01/06/2015
Revision	20
SDS number	20253
SDS status	Approved.
Risk phrases in full	R11 Highly flammable. R36 Irritating to eyes. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness.
Hazard statements in full	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Store Between	Store Between 5°C - 25°C
Contains SVHC	NO