ATABAŞ
New Generation Sustainable Trade
SINCE 1981

SAFETY DATA SHEET (MSDS)

Prepared with reference to the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Regulation (EC) No 1907/2006 (REACH) Annex II as amended, and Regulation (EC) No 1272/2008 (CLP).

Document Reference	ATB-SDS-TOL-2026-001
Revision / Issue Date	Rev. 00 / 09 September 2026
Product Name	TOLUENE
Product Identification	PPQ-047

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product Identifier	TOLUENE – Methylbenzene (Toluol, Phenylmethane), C_7H_8
CAS Number	108-88-3
EC Number	203-625-9
Index Number (CLP)	601-021-00-3
Product Identification	PPQ-047
1.2 Relevant Identified Uses	Industrial solvent (paints, coatings, inks, adhesives); chemical intermediate; gasoline blending component; extraction and process solvent.
Uses Advised Against	Consumer uses; any use involving uncontrolled release or direct human exposure.
1.3 Supplier	ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ – Huzur Mahallesi, Azerbaycan Caddesi, Skyland İstanbul 4 B Blok, 27. Kat, Daire 389-390-391, Sarıyer, İstanbul, Türkiye – Tel: +90 212 801 64 60 – E-mail: ceo@atabas.com.tr – Web: www.atabas.com.tr
1.4 Emergency Telephone	+90 212 801 64 60 (office hours); national poison centre / emergency services: 112 (Türkiye)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance (GHS / Regulation (EC) No 1272/2008):

Flammable Liquid, Category 2	H225
Skin Irritation, Category 2	H315
Reproductive Toxicity, Category 2	H361d
Specific Target Organ Toxicity – Single Exposure, Category 3 (narcosis)	H336
Specific Target Organ Toxicity – Repeated Exposure, Category 2	H373
Aspiration Hazard, Category 1	H304

2.2 Label elements:

Pictograms (GHS)	GHS02 (Flame), GHS07 (Exclamation Mark), GHS08 (Health Hazard)
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 (central nervous system) through prolonged or repeated exposure.

Precautionary Statements – Prevention	P201: Obtain special instructions before use. P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233: Keep container tightly closed. P240: Ground and bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting equipment. P242: Use non-sparking tools. P243: Take action to prevent static discharges. P260: Do not breathe vapours. P280: Wear protective gloves, protective clothing, eye and face protection.
Precautionary Statements – Response	P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor. P331: Do NOT induce vomiting. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P370+P378: In case of fire: use foam, dry chemical or CO_2 to extinguish.
Precautionary Statements – Storage	P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.
Precautionary Statements – Disposal	P501: Dispose of contents/container in accordance with local, national and international regulations.

2.3 Other hazards: Vapours are heavier than air and may travel along the ground to distant ignition sources and flash back. Electrostatic charges may be generated during pumping, transfer and filtering; risk of ignition. The substance is not classified as PBT or vPvB.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	EC No.	Concentration	Classification
Toluene (Methylbenzene)	108-88-3	203-625-9	≥ 99.5 % wt	Flam. Liq. 2 (H225); Asp. Tox. 1 (H304); Skin Irrit. 2 (H315); STOT SE 3 (H336); Repr. 2 (H361d); STOT RE 2 (H373)
Non-aromatic hydrocarbons	–	–	≤ 1500 ppm wt	–

SECTION 4: FIRST AID MEASURES

Inhalation	Remove the affected person to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration by trained personnel. Seek medical attention immediately.
Skin Contact	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and plenty of water. If irritation develops or persists, seek medical attention. Launder contaminated clothing before reuse.
Eye Contact	Rinse cautiously with water for at least 15 minutes, holding the eyelids open. Remove contact lenses if present and easy to do. If irritation persists, obtain medical attention.
Ingestion	Do NOT induce vomiting – aspiration hazard. Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a physician or poison centre immediately.
Most Important Symptoms / Effects	Vapours may cause drowsiness, dizziness, headache and central nervous system depression. Aspiration into the lungs may cause chemical pneumonitis, which can be fatal. Repeated or prolonged skin contact causes defatting, dryness and irritation.
Note to Physician	Treat symptomatically. In case of ingestion or vomiting, risk of aspiration into the lungs; consider gastric lavage only with tracheal intubation. Do not administer adrenaline or similar sympathomimetic drugs (risk of cardiac sensitization).

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Alcohol-resistant foam, dry chemical powder, carbon dioxide (CO_2), water fog / water spray for cooling.
Unsuitable Extinguishing Media	Direct water jet (may spread the fire).
Specific Hazards	Highly flammable liquid (flash point approx. 4 °C, closed cup). Vapours are heavier than air, spread along the ground and may ignite at distant sources with flash-back. Vapour/air mixtures are explosive within approx. 1.1 – 7.1 % vol. Closed containers may rupture violently when heated.
Hazardous Combustion Products	Carbon monoxide, carbon dioxide, dense black smoke and unidentified organic compounds.
Advice for Firefighters	Wear self-contained breathing apparatus (SCBA) and full protective clothing. Cool fire-exposed tanks and containers with water spray from a protected position. Prevent fire-fighting water from entering drains and watercourses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions	Eliminate all ignition sources. Evacuate non-essential personnel. Ensure adequate ventilation. Avoid breathing vapours; wear appropriate PPE as per Section 8. Vapours may accumulate in low areas.
Environmental Precautions	Prevent entry into drains, sewers, surface water, groundwater and soil. Notify the relevant authorities in case of significant release.
Methods of Containment / Clean-up	Stop the leak if safe to do so. Contain the spill with non-combustible absorbent material (sand, earth, vermiculite) and transfer to labelled, sealable recovery containers using spark-proof tools and explosion-proof equipment. Large spills: dike ahead of the spill and recover by pumping (explosion-proof pumps). Dispose of in accordance with Section 13.

SECTION 7: HANDLING AND STORAGE – LOGISTICS REQUIREMENTS

7.1 Precautions for safe handling:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources – no smoking. Take precautionary measures against static discharge: ground and bond containers, tanks, pumps, hoses and receiving equipment during all transfer operations; use non-sparking tools and explosion-proof (ATEX) equipment.

Handle in closed systems or with adequate local exhaust ventilation. Avoid breathing vapours and contact with skin and eyes. Do not eat, drink or smoke when using the product. Wash hands thoroughly after handling.

Do not use compressed air for filling, discharging or handling. Avoid splash filling; keep transfer velocities low until the filling pipe is submerged.

7.2 Conditions for safe storage:

Store in tightly closed, correctly labelled original containers or in dedicated carbon steel / stainless steel tanks, in a cool, dry, well-ventilated place away from direct sunlight, heat and ignition sources, and segregated from oxidizing agents and strong acids. Storage area to be bunded (min. 110 % of largest container), with impermeable flooring and hazardous-area-rated electrical installations. Recommended storage temperature: ambient, not exceeding 40 °C.

Suitable packaging/tank materials: carbon steel, stainless steel; unsuitable: natural rubber, butyl rubber, EPDM and certain plastics attacked by aromatic hydrocarbons.

7.3 Logistics and transfer requirements:

Transport units: dedicated or properly cleaned chemical/product tankers, ISO tank containers (T4 or higher portable tank instruction), road tank vehicles conforming to ADR FL type, or new/reconditioned UN-approved steel drums (1A1) of approximately 200 litres, palletized and secured for export.

Loading and discharge: bond and ground all equipment before transfer; limit line velocity during initial filling (max. 1 m/s until the fill pipe is submerged) to prevent electrostatic charging; use closed-loop or bottom loading with vapour return where available; allow relaxation time before gauging or sampling.

Tank and container condition: clean, dry, gas-free and free of incompatible residues; fitted with flame arresters on vents; pressure/vacuum relief in good order; drums stored bung-up, tightly closed and protected from weather and direct sunlight.

Segregation in warehouses and on board: keep away from oxidizing agents, acids and sources of heat or ignition; observe IMDG segregation requirements for Class 3 goods; do not stow near living quarters or foodstuffs.

Temperature: ambient carriage and storage; no heating required. Protect from temperatures above 40 °C and from direct solar radiation on packaged goods.

Documentation accompanying each shipment: Dangerous Goods Declaration, Bill of Lading / CMR, Certificate of Quality, Certificate of Origin, Packing List and this Safety Data Sheet.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Limit (8h TWA)	Short-Term (STEL)	Basis
Toluene (CAS 108-88-3)	50 ppm (192 mg/m³)	100 ppm (384 mg/m³)	EU IOELV (Directive 2006/15/EC) – skin notation
Toluene (CAS 108-88-3)	20 ppm	–	ACGIH TLV®
Toluene (CAS 108-88-3)	200 ppm (ceiling 300 ppm)	–	OSHA PEL

Engineering Controls	Use closed systems where possible. Provide local exhaust ventilation and general ventilation sufficient to keep airborne concentrations below the occupational exposure limits. Explosion-proof (ATEX-rated) electrical equipment in handling areas. Eye-wash stations and safety showers near the workplace.
Respiratory Protection	Where exposure limits may be exceeded: air-purifying respirator with organic vapour cartridge (type A filter, EN 14387). For high concentrations, confined spaces or emergencies: self-contained breathing apparatus (SCBA).
Hand Protection	Chemical-resistant gloves per EN 374 (e.g. nitrile rubber ≥ 0.4 mm, PVA or Viton®; breakthrough time ≥ 480 min for prolonged contact). Natural rubber and neoprene are not recommended for prolonged contact.
Eye / Face Protection	Chemical safety goggles (EN 166); face shield where splashing is possible.
Skin / Body Protection	Antistatic, flame-retardant protective clothing and safety footwear (conductive/antistatic soles) in hazardous areas.
Hygiene Measures	Do not eat, drink or smoke in work areas. Wash hands after handling. Remove and launder contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State / Appearance	Clear, colourless liquid, free of sediment and cloudiness
Odour / Odour Threshold	Characteristic aromatic (sweet, pungent); approx. 1 – 3 ppm
pH	Not applicable (hydrocarbon)
Melting Point / Freezing Point	-95 °C
Boiling Point / Distillation Range	110.6 °C (distillation range 1.0 °C max. at 760 mm Hg)
Flash Point	Approx. 4 °C (closed cup)
Auto-Ignition Temperature	Approx. 480 °C
Flammability Limits in Air	Lower approx. 1.1 % vol – Upper approx. 7.1 % vol
Vapour Pressure	Approx. 2.9 kPa at 20 °C

Vapour Density (air = 1)	Approx. 3.1
Relative Density (15.56/15.56 °C)	0.869 – 0.873 (ASTM D 4052-96)
Solubility in Water	Approx. 0.52 g/L at 20 °C (practically insoluble)
Partition Coefficient (log Kow)	Approx. 2.73
Kinematic Viscosity	Approx. 0.68 mm²/s at 20 °C
Colour (Pt-Co)	20 max. (ASTM D 1209-00)
Acidity	Not detected (ASTM D 847-96)
Sulfur Compounds (H_2S – SO_2)	Not detected (ASTM D 853-97)
Copper Plate Corrosion	Pass, 1A/1B (ASTM D 849-97)
Explosive / Oxidizing Properties	Not explosive, not oxidizing (vapour/air mixtures are explosive)

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No hazardous reactivity under normal conditions of use, storage and transport.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	Vapours may form explosive mixtures with air. Reacts violently with strong oxidizing agents.
Conditions to Avoid	Heat, sparks, open flames, hot surfaces, static discharge and other ignition sources; direct sunlight on packaged product.
Incompatible Materials	Strong oxidizing agents (e.g. nitric acid, perchlorates, chlorine, liquid oxygen), strong acids; natural rubber and some elastomers are degraded.
Hazardous Decomposition Products	None under normal conditions. On combustion: carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity – Oral	LD_{50} (rat) approx. 5,580 mg/kg – not classified
Acute Toxicity – Dermal	LD_{50} (rabbit) > 5,000 mg/kg – not classified
Acute Toxicity – Inhalation	LC_{50} (rat, 4 h) approx. 25.7 – 28.1 mg/L – not classified
Skin Corrosion / Irritation	Irritating to skin; repeated contact causes defatting and dermatitis (H315)
Serious Eye Damage / Irritation	Mildly irritating; not classified
Respiratory / Skin Sensitization	Not a sensitizer
Germ Cell Mutagenicity	Not classified (evidence negative)
Carcinogenicity	Not classified; IARC Group 3 (not classifiable)
Reproductive Toxicity	Suspected of damaging the unborn child (H361d)
STOT – Single Exposure	Vapours cause drowsiness, dizziness, narcosis (H336)
STOT – Repeated Exposure	May cause damage to the central nervous system through prolonged or repeated exposure (H373)
Aspiration Hazard	May be fatal if swallowed and enters airways – chemical pneumonitis (H304)

SECTION 12: ECOLOGICAL INFORMATION

Acute Aquatic Toxicity	Fish LC_{50} (96 h) approx. 5.5 – 7.6 mg/L; Daphnia EC_{50} (48 h) approx. 3.8 – 8 mg/L; harmful to aquatic life, not classified for aquatic hazard under CLP at this data set
Persistence and Degradability	Readily biodegradable (approx. 80 – 90 % in 28 days, OECD criteria); volatilizes rapidly from water and soil
Bioaccumulative Potential	Low (log Kow approx. 2.73; BCF approx. 8 – 90)
Mobility in Soil	High mobility; high volatility from surfaces
PBT / vPvB Assessment	Not PBT, not vPvB
Other Adverse Effects	Prevent entry into waters, drains and soil; a film on water surfaces may impair oxygen transfer

SECTION 13: DISPOSAL CONSIDERATIONS

Do not discharge into drains, watercourses or soil. Dispose of product residues and contaminated packaging as hazardous waste through a licensed waste-disposal contractor, in accordance with applicable local, national and international regulations (for the EU: Directive 2008/98/EC; indicative EWC code 07 01 04* – other organic solvents, washing liquids and mother liquors). Empty containers retain product residues and flammable vapours: do not cut, weld, drill or grind on or near them; return drums to a licensed reconditioner.

SECTION 14: TRANSPORT INFORMATION

	ADR / RID (Road / Rail)	**IMDG (Sea)**	**IATA (Air)**	**ADN (Inland Waterways)**
UN Number	UN 1294	UN 1294	UN 1294	UN 1294
Proper Shipping Name	TOLUENE	TOLUENE	TOLUENE	TOLUENE
Transport Hazard Class	3	3	3	3
Packing Group	II	II	II	II
Hazard Label(s)	3	3	3	3
Environmental Hazards	No	No (not a Marine Pollutant)	No	No
Classification Code	F1	–	–	F1
Tunnel Restriction Code	(D/E)	–	–	–
Limited Quantities	1 L	1 L	1 L (Y341: 0.5 L)	–
Excepted Quantities	E2	E2	E2	–
Transport Category	2	–	–	–
EmS (Fire / Spillage)	–	F-E, S-D	–	–
Stowage and Handling	–	Category B; clear of living quarters; protected from sources of heat	–	–
Segregation	–	Away from oxidizing agents (Class 5.1) and heat sources	–	–
Packing Instructions	P001	P001	PI 353 (passenger, max. 5 L) / PI 364 (cargo, max. 60 L)	–

Transport in bulk according to Annex II of MARPOL and the IBC Code: permitted – IBC Code chapter 17, ship type 3, pollution category Y (toluene); carriage subject to the vessel's Certificate of Fitness.

Special precautions for the carrier: carry the product only in properly placarded, certified transport units accompanied by ADR/IMDG transport documents and instructions in writing. Drivers must hold a valid ADR certificate. Ensure earthing/bonding during loading and discharge and observe the tunnel restriction code shown above.

SECTION 15: REGULATORY INFORMATION

This Safety Data Sheet has been prepared with reference to the UN GHS, Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP). ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ acts as a trading company; regulatory registrations, where applicable, rest with the manufacturer, and the producer's documentation issued for each shipment shall govern. A Certificate of Origin is provided with each shipment.

Toluene is listed in major chemical inventories (EINECS/ELINCS, TSCA, DSL, IECSC, PICCS, AICS, KECI). It is subject to national controls on solvent misuse in certain jurisdictions and, as a listed precursor under some national regimes, may require import/export notification; the buyer is responsible for compliance with the import regulations of the destination country.

Sanctions compliance: ATABAŞ GLOBAL DIŞ TİCARET ANONİM ŞİRKETİ conducts its business in full compliance with applicable international trade control regulations, including the sanctions regimes administered by the United States Office of Foreign Assets Control (OFAC), the European Union, the United Kingdom (OFSI) and the United Nations Security Council. ATABAŞ does not work with sanctioned countries, sanctioned entities or sanctioned individuals, and does not source, sell, ship or finance products of sanctioned origin.

SECTION 16: OTHER INFORMATION

Full Text of Hazard Statements (Section 3)	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.
Abbreviations	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; RID: Rail; ADN: Inland Waterways; IMDG: International Maritime Dangerous Goods Code; IATA: International Air Transport Association; GHS: Globally Harmonized System; CLP: Classification, Labelling and Packaging; TWA: Time-Weighted Average; STEL: Short-Term Exposure Limit; PBT: Persistent, Bioaccumulative and Toxic; vPvB: very Persistent and very Bioaccumulative; EmS: Emergency Schedule; SCBA: Self-Contained Breathing Apparatus.
Revision	Rev. 00 – first issue, 09 September 2026.

The information contained in this Safety Data Sheet is provided in good faith and is believed to be accurate as of the date of issue. It relates only to the specific material designated and may not be valid where the material is used in combination with other materials or in any process. It is the responsibility of the user to satisfy itself as to the suitability and completeness of this information for its own particular use. No warranty, express or implied, is given.