POLYBOND

SAFETY DATA SHEET

Universal Thinners

Date of Issue: 27 June 2026 Revision Number: 2.5

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

- Product Name: Polybond Universal Thinners
- Product Description: A paint thinner.

1.2 Relevant Identified Uses and Uses Advised Against

- Identified Uses: Paint thinner and solvent for industrial coatings.
- Uses Advised Against: Not for domestic use or non-industrial applications.

1.3 Details of the Supplier of the Safety Data Sheet

- Supplier: Polybond Ltd.
- Address: Unit 6, William Street, Northam, Southampton, Hampshire, SO14 5QH, United Kingdom
- Telephone: +44 (0) 2380 988350
- Fax: +44 (0) 2380 988355
- Email: sales@polybond.co.uk

1.4 Emergency Telephone Number

- Emergency Contact: +44 (0) 2380 988350 (Monday–Friday, 09:00–17:00 BST)
- Out-of-Hours Emergency: UK National Poisons Information Service (NPIS): +44 (0) 344 892 0111 (24/7)

Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture

Classification according to GB CLP (SI 2019/720 — retained EU law):

Hazard Class	Category	H-Code
Flammable liquids	3	H226
Acute toxicity — skin	4	H312
Skin irritation	2	H315
Acute toxicity — inhalation	4	H332

2.2 Label Elements

- Signal word: Danger
- Hazard pictograms: GHS02, GHS05, GHS07, GHS08, GHS09 (as applicable)

Hazard statements:

- H226 Flammable liquid and vapour.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H332 Harmful if inhaled.

Precautionary statements:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310 IF SWALLOWED: Immediately call a doctor.
- P331 Do NOT induce vomiting.

Contains: Xylene

2.3 Other Hazards

● Vapours are heavier than air and may spread along the ground. Refer to hazard statements above for full hazard profile.

Section 3: Composition/Information on Ingredients

3.2 Mixtures – Hazardous Ingredients

Chemical Name	CAS No.	EC No.	UK REACH Reg. No.	Conc. (% w/w)	Classification (GB CLP)
Xylene	1330-20-7	215-535-7	Notification pending (UK REACH transitional provisions apply)	100%	H226, H312, H315, H332

Note: UK REACH registration numbers will be confirmed upon completion of GB registration under SI 2019/758. Transitional provisions apply.

Section 4: First-Aid Measures

4.1 Description of First Aid Measures

● **General:** If medical attention is required, present this SDS to the physician. Remove all contaminated clothing. The person must rest and be kept under observation even if there are no immediate signs of symptoms. Define a first aid plan prior to commencing work.

● **Inhalation:** Remove affected person to fresh air and keep at rest. If breathing is irregular or has stopped, administer artificial respiration. Seek medical attention.

● **Skin contact:** Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes. If redness, swelling, pain and/or blisters occur, transport to nearest medical facility.

● **Eye contact:** Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Transport to nearest medical facility for additional treatment.

● **Ingestion:** Do NOT induce vomiting. If swallowed, seek medical advice immediately. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Seek immediate medical attention.

● **Note for physicians:** Potential for chemical pneumonitis. Consider gastric lavage with protected airway and activated charcoal. Potential for cardiac sensitisation. Consider oxygen therapy.

4.2 Most Important Symptoms and Effects

● **Inhalation:** May cause drowsiness and dizziness.

● **Ingestion:** Symptoms may include nausea and vomiting.

● **Skin contact:** Prolonged contact may cause irritation, redness, dry skin and dermatitis.

● **Eye contact:** Symptoms may include irritation or pain, lacrimation and redness of the eye tissue.

4.3 Immediate Medical Attention

● Treat symptomatically. Show this SDS to a physician.

Section 5: Firefighting Measures

5.1 Extinguishing Media

● Suitable: Carbon dioxide, dry chemical, powder or water fog/spray. For large fires — foam.

● Unsuitable: Water jets (may spread residues and burning liquid).

5.2 Special Hazards

● In a fire or if heated, a pressure increase may burst containers. The vapour/gas is heavier than air and will spread along the ground. Combustion products may include oxides of carbon (CO_x).

5.3 Advice for Firefighters

● Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Keep run-off water out of sewers and water sources. Dike for water control. Stay upwind, evacuate personnel, move containers from fire area if safe to do so. Use water spray to control vapours. If risk of water pollution occurs, notify appropriate authorities.

Section 6: Accidental Release Measures

6.1 Personal Precautions

● Use protective gloves, goggles, respirator and suitable protective clothing. Avoid contact with skin and eyes. Do not smoke, use open fire or other sources of ignition. Restrict access to authorised personnel. Stay upwind. Isolate hazard area. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding all equipment. Ventilate contaminated area thoroughly.

6.2 Environmental Precautions

● Do not allow to enter into surface water or sewer systems. Notify authorities if any exposure to the general public or environment occurs or is likely to occur. The vapour is heavier than air, spreads along the ground and distant ignition is possible.

6.3 Methods and Material for Containment and Cleaning Up

● For large liquid spills (>300 litres), transfer by mechanical means (e.g. vacuum truck) to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Allow residues to evaporate or soak up with an appropriate non-flammable absorbent material (not sawdust) and dispose of safely. For small spills (<300 litres), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal.

6.4 Reference to Other Sections

● See Sections 8 and 13.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

● Avoid creating dusty conditions and prevent wind dispersal. Good industrial housekeeping and personal hygiene practice should be followed. When using do not eat, drink or smoke. Wear suitable gloves and eye/face protection (see Section 8). Wash thoroughly after handling. Remove contaminated clothing and wash before re-use. Avoid contact with eyes, skin and clothing. Emergency eyewash stations and showers should be made available.

7.2 Conditions for Safe Storage

● Store in a dry ventilated area. Reseal open packages to prevent spillage. Keep containers tightly closed. Keep away from oxidising substances.

7.3 Specific End Use(s)

● Paint thinner and solvent for industrial coatings.

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Workplace Exposure Limits (WELs) — HSE EH40 (GB):

Substance	TWA (ppm)	TWA (mg/m³)	STEL (ppm)	STEL (mg/m³)
Xylene, all isomers	50	220	100	441

DNELs (Workers, Systemic, Chronic):

Ingredient	Inhalation (mg/m³)	Dermal (mg/kg bw/day)	Oral (mg/kg bw/day)
Xylene	77 (Workers); 14.8 (General)	1.6 (Workers)	—

PNECs:

Ingredient	Freshwater (mg/L)	Marine Water (mg/L)	Sediment FW (mg/kg)	Soil (mg/kg)
Xylene	0.327	0.327	12.46	2.31

8.2 Exposure Controls

● Adequate ventilation should be provided such that WELs per HSE EH40 are not exceeded. Local Exhaust Ventilation is preferable to personal protective equipment.

● PPE: Butyl rubber gloves ≥0.5 mm thick, chemical splash goggles, protective overalls, chemical respirator and chemically resistant safety shoes.

● Provide eyewash station and safety shower. Wear appropriate clothing to prevent repeated or prolonged skin contact.

- Hygiene: Wash hands at the end of each work shift and before eating, smoking and using the toilet. Remove any clothing that becomes wet or contaminated. Contaminated clothing should be placed in a closed container until disposal or decontamination.

Section 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

- **Appearance:** Translucent liquid
- **Odour:** Aromatic
- **Boiling point:** 139.1°C
- **Melting point:** -47.8°C
- **Flash point:** 27°C (closed cup)
- **Auto-ignition temperature:** 527°C
- **Explosion limits:** 1.1–7%
- **Density:** 0.864 g/cm³ @ STP
- **Water solubility:** 146,175 mg/l @ 25°C
- **Viscosity:** 0.581 mPa @ 25°C
- **Surface tension:** 28.47 mN/m @ 25°C

9.2 Other Information

- No additional data available.

Section 10: Stability and Reactivity

- **10.1 Reactivity:** Flammable liquid and vapour.
- **10.2 Chemical Stability:** Stable under normal conditions.
- **10.3 Possibility of Hazardous Reactions:** None known under normal conditions.
- **10.4 Conditions to Avoid:** Heat, flames, static discharges and all ignition sources.
- **10.5 Incompatible Materials:** Oxidising agents.
- **10.6 Hazardous Decomposition Products:** Does not decompose under normal conditions. When heated, produces oxides of carbon.

Section 11: Toxicological Information

11.1 Information on Toxicological Effects

- **Skin:** Prolonged or repeated contact causes irritation which may lead to dermatitis.
- **Eyes:** May cause irritation to eyes.
- **Inhalation:** May cause irritation to the respiratory tract and coughing.
- **Ingestion:** May cause nausea and vomiting. Ingesting large quantities may lead to kidney failure.

Toxicological data on ingredients:

Endpoint	Result
Acute Oral LD50 — Xylene	3523 mg/kg (Rat)
Acute Dermal LD50 — Xylene	>4200 mg/kg (Rabbit)
Acute Inhalation LC50 — Xylene	6700 ppm (Rat)

11.2 Other Hazards

- None known.

Section 12: Ecological Information

12.1 Toxicity

- Universal Thinners — xylene biodegrades approximately 50% in 23 days (mineralisation). Bioconcentration factor ≤25.9.

Ingredient / Species	Medium	Period	Test	Result

Xylene — Oncorhynchus mykiss (Rainbow Trout)	Fresh water	96h	LC50	2.6 mg/l
Xylene — Daphnia magna	Fresh water	24h	IC50	1 mg/l
Xylene — Pseudokirchnerella subcapitata	Fresh water	73h	EC50	4.36 mg/l
Xylene — Nitrosomonas sp.	Fresh water	24h	EC50	96 mg/l

- **12.2 Persistence and Degradability:** No data available on the degradability of this product.
- **12.3 Bioaccumulative Potential:** No data available on the bioaccumulation of this product.
- **12.4 Mobility in Soil:** No data available.
- **12.5 PBT and vPvB Assessment:** This product does not contain any PBT or vPvB substances.
- **12.6 Endocrine Disrupting Properties:** None known.
- **12.7 Other Adverse Effects:** None.

Section 13: Disposal Considerations

13.1 Waste Treatment Methods

- Hazardous waste (EWC Code: 08 01 11*). Contact specialist disposal companies. Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand and dispose of at a licensed hazardous waste collection point.

Section 14: Transport Information

Parameter	ADR/RID (Road/Rail)	IMDG (Sea)	IATA (Air)
UN Number	1307	1307	1307
Proper Shipping Name	XYLENES	XYLENES	XYLENES
Hazard Class	3	3	3
Packing Group	III	III	III
EMS / Special Precautions	EMS F-E, S-E; Hazard ID 30; Tunnel Code (D/E)	EMS F-E, S-E	—

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation

- UK REACH (SI 2019/758 — retained EU law); GB CLP (SI 2019/720 — retained EU law); COSHH Regulations 2002; Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009).
- Workplace Exposure Limits: HSE EH40 (4th Edition, as amended).
- This SDS has been prepared in accordance with GB REACH Annex II requirements (SI 2019/758) as applicable post-Brexit.

15.2 Chemical Safety Assessment

- Not conducted.

Section 16: Other Information

16.1 Full Text of Hazard Statements

- H226 Flammable liquid and vapour.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H332 Harmful if inhaled.

16.2 Summary of Revisions (Rev 2.5 — 27 June 2026)

- Section 14: UN name corrected ('Xylenes' — note original had typo 'Xyelenes'). IATA column added.
- Sections 2.1 & 15.1: References updated from EC Regulations to GB retained law (SI 2019/720; SI 2019/758).
- Section 3: Column header updated to 'UK REACH Reg. No.'; transitional provisions noted.

- Section 8: WELs updated to reference HSE EH40 (GB) with TWA/STEL values where applicable.
- Section 14: IATA air transport information added.
- Section 15: Updated to GB/UK legislative references throughout.
- Date updated to 27 June 2026; Revision Number updated to 2.5.

16.3 Abbreviations

- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.
- CAS: Chemical Abstracts Service.
- DNEL: Derived No-Effect Level.
- EC50: Effective Concentration, 50%.
- EWC: European Waste Catalogue.
- GHS: Globally Harmonized System.
- IC50: Concentration that is halfway between a baseline and completely inhibiting a biological function.
- IATA: International Air Transport Association.
- IMDG: International Maritime Dangerous Goods Code.
- LC50: Lethal Concentration, 50%.
- LD50: Lethal Dose, 50%.
- LL50: Similar to LC50 but tests the water phase from incompletely miscible materials.
- EL50: Similar to EC50 but tests the water phase from incompletely miscible materials.
- NOEC: No Observed Effect Concentration.
- PBT: Persistent, Bioaccumulative, Toxic.
- PNEC: Predicted No-Effect Concentration.
- REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals.
- STEL: Short-Term Exposure Limit.
- STOT RE: Specific Target Organ Toxicity, Repeated Exposure.
- STOT SE: Specific Target Organ Toxicity, Single Exposure.
- STP: Standard Temperature and Pressure (25°C, 1 atm).
- TWA: Time-Weighted Average.
- vPvB: Very Persistent and Very Bioaccumulative.
- WEL: Workplace Exposure Limit.

Revision date: 27 June 2026

Disclaimer: This Safety Data Sheet is provided for the health and safety of users. Polybond Ltd. accepts no liability for errors or omissions. This document does not replace a workplace-specific risk assessment. Prepared in accordance with UK REACH (SI 2019/758) and GB CLP (SI 2019/720) Regulations.