

SAFETY DATA SHEET

Section 1. Identification

Product identifier	: MXM31
Product name	: MAXIMUM ECONOMY SLOW HARDENER
Date of issue	: 2/5/2026
Version	: 1.03
<u>Relevant identified uses of the substance or mixture and uses advised against</u>	
Identified uses	: Coating component.
Uses advised against	: Not for sale to or use by consumers.
Supplier's details	: U-POL US Inc. 50 Applied Bank Blvd. Suite 300 Glen Mills, Pennsylvania 19342 T (610) 746 7081 technicalsupport@u-pol.com
Product information	: (855) 6-AXALTA
Emergency telephone number	: CHEMTREC: +44 (0) 870 8200418 (24 hrs)

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

GHS label elements

Hazard pictograms



Signal word

: Warning

Section 2. Hazards identification

Hazard statements	: H226 - Flammable liquid and vapor. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H332 - Harmful if inhaled. H335 - May cause respiratory irritation. H351 - Suspected of causing cancer. H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	
Prevention	: P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 - Do not breathe vapor. P264 - Wash hands thoroughly after handling.
Response	: P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. 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 or attention.
Storage	: P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.
Hazards identified when used	: <input checked="" type="checkbox"/> No known significant effects or critical hazards.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

Ingredient name	Synonyms	%	Identifiers
Hexamethylene diisocyanate, oligomers	Hexane, 1,6-diisocyanato-, homopolymer; Hexamethylene diisocyanate, homopolymer; Hexamethylene diisocyanate polymer; Isocyanic acid, hexamethylene ester; Hexamethylene diisocyanate (HDI) homopolymer; Poly (hexamethylene diisocyanate); Polymer of 1,6-diisocyanatohexane; Trimer of isocyanate monomer (including crude tolylene diisocyanate, polymethylene polyphenyl polyisocyanate), and	≥15 - ≤40	CAS: 28182-81-2

Section 3. Composition/information on ingredients

XYLENE	<p>polymer thereof (i.e. isocyanurate-containing isocyanate).; Polymer (i.e.urethodione group bearing isocyanate) of isocyanate monomer; Condensate (i.e. carbodiimide group-bearing isocyanate) or isocyanate monomer; 1,6-Diisocyanatohexane homopolymer</p> <p>Benzene, dimethyl-; Xylol; Benzene, dimethyl-, mixed isomers; xylene, mixed isomers, pure; xylene, crude; photosensitive emulsion consisting of cyclized polyisoprene containing: — 55 % or more but not more than 75 % by weight of xylene (CAS RN 1330-20-7) and — 12 % or more but not more than 18 % by weight of ethylbenzene (CAS RN 100-41-4); Benzene, dimethyl-; Xylene (mixed); xylene (total); Xylenes; Dimethylbenzene</p>	≥15 - ≤40	CAS: 1330-20-7
Ethylene glycol butyl ether acetate	<p>butylglycol acetate; Ethanol, 2-butoxy-, 1-acetate; Ethanol, 2-butoxy-, acetate; Ethylene glycol, monobutyl ether acetate; 2-BUTOXYETHANOL ACETATE; Ektasolve EB acetate; Butyl Cellosolve acetate; Ethylene glycol monobutyl ether acetate; EGBEA; n-Butoxyethyl acetate; BUTOXYETHYL ACETATE</p>	≥5 - ≤10	CAS: 112-07-2
ethylbenzene	<p>Benzene, ethyl-; Phenylethane; Ethylbenzol; photosensitive emulsion consisting of cyclized polyisoprene containing: — 55 % or more but not more than 75 % by weight of xylene (CAS RN 1330-20-7) and — 12 % or more but not more than 18 % by weight of ethylbenzene (CAS RN 100-41-4); EB; Mono-(or di-) methyl (ethyl,bromoallyl, bromopropyl,oxycarbonyl orchloropropyl,oxycarbonyl) benzene</p>	≥5 - ≤10	CAS: 100-41-4
solvent naphtha (petroleum), light aromatic	<p>Low boiling point naphtha - unspecified; Solvent naphtha (petroleum), light arom; Solvent naphtha, petroleum, light aromatic; Aromatic hydrocarbon</p>	≥3 - ≤7	CAS: 64742-95-6

Section 3. Composition/information on ingredients

1,2,4-trimethylbenzene	<p>solvents - medium flashpoint; Light aromatic solvent naphtha; Solvent naphtha, light aromatic; Solvent naphtha (petroleum), light aromatic; Light aromatic solvent naphtha (petroleum) (C8 to C10); Solvent naphtha, petroleum, light arom.; AROMATIC PETROLUUM DISTILLATE; SOLVENT, AROMATIC PETROLEUM</p> <p>Benzene, 1,2,4-trimethyl-; . pseudo.-Cumene; Pseudocumene; psi-Cumene; Asymmetrical trimethylbenzene; hemimellitene; solution of more than 61 % but not more than 63 % by weight of methylcyclopentadienyl manganese tricarbonyl (CAS RN 12108-13-3) in an aromatic hydrocarbon solvent, containing by weight not more than: — 4,9 % of 1,2,4-trimethylbenzene (CAS RN 95-63-6), — 4,9 % of naphthalene (91-20-3), and — 0,5 % of 1,3,5-trimethylbenzene (108-67-8); Trimethylbenzene; unsym-Trimethylbenzene; Trialkyl (C1-4)benzene; Tri-or tetramethylbenzene</p>	≥1 - ≤5	CAS: 95-63-6
n-butyl acetate	<p>Acetic acid, butyl ester; Butyl Acetate; n-Butyl-acetate; Butyl ethanoate; n-Butyl ester of acetic acid; product composed of hydrocarbons (predominantly paraffinic and naphthenic) and n-butyl acetate; 1-butyl acetate; 1-Acetoxybutane; Butyl ester, Acetic acid; normal butyl acetate; Acetic acid, n-butyl ester</p>	≥1 - ≤5	CAS: 123-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. May cause respiratory irritation.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

Section 4. First aid measures

- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.

- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

- Storage code** : IC

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Hexamethylene diisocyanate, oligomers XYLENE	None. CAL OSHA PEL (United States, 1/2025) [xylene] STEL 15 minutes: 655 mg/m ³ . STEL 15 minutes: 150 ppm. C: 300 ppm. TWA 8 hours: 435 mg/m ³ . TWA 8 hours: 100 ppm. OSHA PEL (United States, 5/2018) [Xylenes] TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m ³ . OSHA PEL 1989 (United States, 3/1989) [Xylenes (o-, m-, p-isomers)] TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m ³ . STEL 15 minutes: 150 ppm. STEL 15 minutes: 655 mg/m ³ . ACGIH TLV (United States, 1/2024) [p-xylene and mixtures containing p-xylene] A4. Ototoxicant. TWA 8 hours: 20 ppm.
Ethylene glycol butyl ether acetate	NIOSH REL (United States, 10/2020) TWA 10 hours: 5 ppm. TWA 10 hours: 33 mg/m ³ . ACGIH TLV (United States, 1/2024) A3. TWA 8 hours: 20 ppm.
ethylbenzene	NIOSH REL (United States, 10/2020) TWA 10 hours: 100 ppm. TWA 10 hours: 435 mg/m ³ . STEL 15 minutes: 125 ppm. STEL 15 minutes: 545 mg/m ³ . CAL OSHA PEL (United States, 1/2025) STEL 15 minutes: 130 mg/m ³ . STEL 15 minutes: 30 ppm. TWA 8 hours: 22 mg/m ³ . TWA 8 hours: 5 ppm. OSHA PEL (United States, 5/2018) TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m ³ . OSHA PEL 1989 (United States, 3/1989) TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m ³ . STEL 15 minutes: 125 ppm. STEL 15 minutes: 545 mg/m ³ . ACGIH TLV (United States, 1/2024) A3. Ototoxicant. TWA 8 hours: 20 ppm.
solvent naphtha (petroleum), light aromatic 1,2,4-trimethylbenzene	None. NIOSH REL (United States, 10/2020) TWA 10 hours: 25 ppm. TWA 10 hours: 125 mg/m ³ . CAL OSHA PEL (United States, 1/2025) [trimethylbenzene, all isomers]

Section 8. Exposure controls/personal protection

n-butyl acetate	<p>TWA 8 hours: 125 mg/m³. TWA 8 hours: 25 ppm. OSHA PEL 1989 (United States, 3/1989) [Trimethyl benzene] TWA 8 hours: 25 ppm. TWA 8 hours: 125 mg/m³. ACGIH TLV (United States, 1/2024) A4. TWA 8 hours: 10 ppm. NIOSH REL (United States, 10/2020) TWA 10 hours: 150 ppm. TWA 10 hours: 710 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 950 mg/m³. CAL OSHA PEL (United States, 1/2025) STEL 15 minutes: 950 mg/m³. STEL 15 minutes: 200 ppm. TWA 8 hours: 710 mg/m³. TWA 8 hours: 150 ppm. OSHA PEL (United States, 5/2018) TWA 8 hours: 150 ppm. TWA 8 hours: 710 mg/m³. OSHA PEL 1989 (United States, 3/1989) TWA 8 hours: 150 ppm. TWA 8 hours: 710 mg/m³. STEL 15 minutes: 200 ppm. STEL 15 minutes: 950 mg/m³. ACGIH TLV (United States, 1/2024) [Butyl acetates] STEL 15 minutes: 150 ppm. TWA 8 hours: 50 ppm.</p>
-----------------	---

Biological exposure indices

Ingredient name	Exposure indices
<p> XYLENE</p> <p style="margin-top: 20px;">ethylbenzene</p>	<p>ACGIH BEI (United States, 1/2024) [xylenes (technical or commercial grades)] BEI: 0.3 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.</p> <p>ACGIH BEI (United States, 1/2024) BEI: 150 mg/g creatinine, sum of mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift.</p>

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 8. Exposure controls/personal protection

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid.
- Color** : Clear.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Technically not possible to measure
- Boiling point or initial boiling point and boiling range** : 104.4 to 200°C (219.9 to 392°F)
- Flash point** : Closed cup: 29.8°C (85.6°F)
- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : Lower: 0.5%
Upper: 9.8%

Section 9. Physical and chemical properties

Vapor pressure	: 0.47 kPa (3.54 mm Hg)
Relative vapor density	: Not available.
Relative density	: Not available.
Density	: 0.963 g/cm ³
Solubility in water	: Not available.
Miscible with water	: No.
Partition coefficient: n-octanol/water	: Not applicable.
Auto-ignition temperature	: 280°C (536°F)
Decomposition temperature	: Not applicable.
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.

Particle characteristics

Median particle size	: Not applicable.
-----------------------------	-------------------

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
Hexamethylene diisocyanate, oligomers	Rat - Inhalation - LC50 Dusts and mists 18500 mg/m ³ [1 hours]
XYLENE	Rat - Oral - LD50 4300 mg/kg <u>Toxic effects:</u> Liver - Other changes Kidney, Ureter, and Bladder - Other changes
Ethylene glycol butyl ether acetate	Rat - Inhalation - LC50 Gas. 5000 ppm [4 hours] Rabbit - Dermal - LD50 1500 mg/kg <u>Toxic effects:</u> Kidney, Ureter, and Bladder - Hematuria Kidney,

Section 11. Toxicological information

Ureter, and Bladder - Other changes in urine composition Blood - Normocytic anemia

Rat - Male, Female - Oral - LD50

1880 mg/kg

OECD [Acute Oral Toxicity]

Rat - Inhalation - LC50 Vapor

7.82 mg/l [4 hours]

OECD [Acute Inhalation Toxicity]

ethylbenzene

Rat - Oral - LD50

3500 mg/kg

Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes

Rabbit - Dermal - LD50

>5000 mg/kg

solvent naphtha (petroleum), light aromatic

Rat - Oral - LD50

8400 mg/kg

Toxic effects: Behavioral - Somnolence (general depressed activity) Behavioral - Tremor Lung, Thorax, or Respiration - Other changes

Rabbit - Dermal - LD50

3492 mg/kg

1,2,4-trimethylbenzene

Rat - Oral - LD50

5 g/kg

Rat - Inhalation - LC50 Vapor

18000 mg/m³ [4 hours]

n-butyl acetate

Rat - Oral - LD50

10768 mg/kg

Toxic effects: Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Other changes Liver - Other changes

Rabbit - Dermal - LD50

>17600 mg/kg

Rat - Inhalation - LC50 Vapor

21.1 mg/l [4 hours]

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Product/ingredient name

XYLENE

Result

Rat - Skin - Mild irritant

Duration of treatment/exposure: 8 hours

Amount/concentration applied: 60 uL

Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Rabbit - Skin - Moderate irritant

Amount/concentration applied: 100 %

ethylbenzene

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 15 mg

Conclusion/Summary [Product] : Not available.

Section 11. Toxicological information

Serious eye damage/eye irritation

Product/ingredient name

XYLENE

Result

Rabbit - Eyes - Mild irritant

Amount/concentration applied: 87 mg

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 5 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Product/ingredient name

Hexamethylene diisocyanate, oligomers

Result

Mouse - skin

OECD [Skin Sensitization: Local Lymph Node Assay]

Result: Sensitizing

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
XYLENE	-	3	-
ethylbenzene	-	2B	-

Reproductive toxicity

Not available.

Section 11. Toxicological information

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
Hexamethylene diisocyanate, oligomers	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
XYLENE	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
solvent naphtha (petroleum), light aromatic	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
1,2,4-trimethylbenzene	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
n-butyl acetate	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
ethylbenzene	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Aspiration hazard

Product/ingredient name	Result
XYLENE	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
solvent naphtha (petroleum), light aromatic	ASPIRATION HAZARD - Category 1
1,2,4-trimethylbenzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: Harmful if inhaled. May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing

Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Result

Not available.

- Conclusion/Summary [Product]** : Not available.

- General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
MAXIMUM ECONOMY SLOW HARDENER	6021.4	2810.4	17262.5	66.4	15.2
Hexamethylene diisocyanate, oligomers	N/A	N/A	N/A	N/A	4.625
XYLENE	4300	1100	5000	N/A	N/A
Ethylene glycol butyl ether acetate	1880	1500	N/A	11	N/A
ethylbenzene	3500	N/A	N/A	11	N/A
solvent naphtha (petroleum), light aromatic	8400	3492	N/A	N/A	N/A
1,2,4-trimethylbenzene	5000	N/A	N/A	18	N/A
n-butyl acetate	10768	N/A	N/A	21.1	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Hexamethylene diisocyanate, oligomers	Acute - LC50 Fish - <i>danio rerio</i> >100 mg/l [96 hours]
	Acute - EC50 Daphnia - <i>Daphnia magna</i> >100 mg/l [48 hours]
XYLENE	Acute - LC50 - Fresh water Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u> : 31 days; <u>Size</u> : 18.4 mm; <u>Weight</u> : 0.077 g 13.4 mg/l [96 hours] <u>Effect</u> : Mortality
	EC50 Crustaceans - <i>Penaeus monodon</i> 3.82 mg/l [48 hours]
Ethylene glycol butyl ether acetate	Chronic - LC50 Fish - Trout 11 mg/l [96 hours]
ethylbenzene	Acute - LC50 - Marine water Crustaceans - Brine shrimp - <i>Artemia sp.</i> - Nauplii <u>Age</u> : 2 to 3 13.3 mg/l [48 hours] <u>Effect</u> : Mortality
	Acute - EC50 - Fresh water Algae - Green algae - <i>Raphidocelis subcapitata</i> 3600 µg/l [96 hours] <u>Effect</u> : Population
1,2,4-trimethylbenzene	Acute - LC50 - Marine water Crustaceans - Scud - <i>Elasmopus pecteniscrus</i> - Adult 4910 µg/l [48 hours] <u>Effect</u> : Mortality
	Acute - LC50 - Fresh water Fish - Fathead minnow - <i>Pimephales promelas</i> <u>Age</u> : 34 days 7720 µg/l [96 hours] <u>Effect</u> : Mortality
n-butyl acetate	Acute - LC50 - Marine water Fish - Inland silverside - <i>Menidia beryllina</i> 185 ppm [96 hours] <u>Effect</u> : Mortality

Conclusion/Summary [Product] : Not available.

Persistence and degradability

Product/ingredient name	Result
Hexamethylene diisocyanate, oligomers	Aerobic 1% [28 days] - Not readily
XYLENE	OECD 301 F 90% [28 days]
Ethylene glycol butyl ether acetate	>60% [28 days] - Readily

Section 12. Ecological information

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<input checked="" type="checkbox"/> Hexamethylene diisocyanate, oligomers	-	-	Not readily
<input type="checkbox"/> XYLENE	-	-	Readily
<input type="checkbox"/> Ethylene glycol butyl ether acetate	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
<input checked="" type="checkbox"/> Hexamethylene diisocyanate, oligomers	5.54	367.7	Low
<input type="checkbox"/> XYLENE	3.12	8.1 to 25.9	Low
<input type="checkbox"/> Ethylene glycol butyl ether acetate	1.51	-	Low
<input type="checkbox"/> ethylbenzene	3.6	-	Low
<input type="checkbox"/> solvent naphtha (petroleum), light aromatic	-	10 to 2500	High
<input type="checkbox"/> 1,2,4-trimethylbenzene	3.63	243	Low
<input type="checkbox"/> n-butyl acetate	2.3	-	Low

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.






Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
<input checked="" type="checkbox"/> Xylene	1330-20-7	Listed	U239

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
Transport hazard class(es)	3 	3 	3 	3 	3 
Packing group	III	III	III	III	III
Environmental hazards	No.	No.	No.	No.	No.

Additional information

DOT Classification : **Reportable quantity** 345.25 lbs / 156.74 kg [42.998 gal / 162.77 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

The actual shipping description for this product may vary based several factors including, but not limited to, the volume of material, size of the container, mode of transport and use of exemptions or exceptions found in the applicable regulations. The information provided in Section 14 is one possible shipping description for this product. Consult your shipping specialist or supplier for appropriate assignment information.

Section 15. Regulatory information

U.S. Federal regulations

TSCA 8(a) PAIR: 2-methoxy-1-methylethyl acetate; naphthalene

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

TSCA 8(c) calls for record of SAR: hexamethylene-di-isocyanate

Clean Water Act (CWA) 307: ethylbenzene; toluene; naphthalene; benzene

Clean Water Act (CWA) 311: XYLENE ; ethylbenzene; n-butyl acetate; toluene; naphthalene; benzene

TSCA 12(b) - Chemical export notification

Not applicable.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Section 15. Regulatory information

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 3
 ACUTE TOXICITY (inhalation) - Category 4
 SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2A
 SKIN SENSITIZATION - Category 1
 CARCINOGENICITY - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Composition/information on ingredients

Name	%	Classification
Hexamethylene diisocyanate, oligomers	≥15 - ≤40	ACUTE TOXICITY (inhalation) - Category 4 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
XYLENE	≥15 - ≤40	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 ASPIRATION HAZARD - Category 1
Ethylene glycol butyl ether acetate	≥5 - ≤10	FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4
ethylbenzene	≥5 - ≤10	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
solvent naphtha (petroleum), light aromatic	≥3 - ≤7	ASPIRATION HAZARD - Category 1 FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Section 15. Regulatory information

1,2,4-trimethylbenzene	≥1 - ≤5	ASPIRATION HAZARD - Category 1 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
n-butyl acetate	≥1 - ≤5	ASPIRATION HAZARD - Category 1 FLAMMABLE LIQUIDS - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	XYLENE	1330-20-7	≥15 - ≤40
	2-butoxyethyl acetate	112-07-2	≥5 - ≤10
	ethylbenzene	100-41-4	≥5 - ≤10
	1,2,4-trimethylbenzene	95-63-6	≥1 - ≤5
Supplier notification	XYLENE	1330-20-7	≥15 - ≤40
	2-butoxyethyl acetate	112-07-2	≥5 - ≤10
	ethylbenzene	100-41-4	≥5 - ≤10
	1,2,4-trimethylbenzene	95-63-6	≥1 - ≤5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

- Massachusetts** : The following components are listed: XYLENE; ETHYL BENZENE; PSEUDOCUMENE; BUTYL ACETATE
- New York** : The following components are listed: Xylene mixed; Ethylbenzene; Butyl acetate
- New Jersey** : The following components are listed: XYLENES; 2-BUTOXYETHYL ACETATE; ETHYL BENZENE; PSEUDOCUMENE; n-BUTYL ACETATE
- Pennsylvania** : The following components are listed: BENZENE, DIMETHYL-; BENZENE, ETHYL-; PSEUDOCUMENE; ACETIC ACID, BUTYL ESTER

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

- Canada** : All components are listed or exempted.
- United States** : All components are listed or exempted.

Section 16. Other information

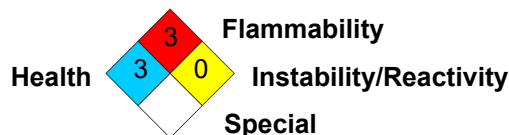
Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		3
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



History

Date of issue : 2/5/2026

Version : 1.03

Product stewardship and regulatory compliance.

Key to abbreviations

: ATE = Acute Toxicity Estimate

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

▣ Indicates information that has changed from previously issued version.

Notice to reader

This product is intended for industrial use only.

Safety Data Sheet (SDS) content is believed to be accurate as of its issue date, but is subject to change as new information is received by Axalta Coatings Systems, LLC or any of its subsidiaries or affiliates (Axalta). This SDS may incorporate information that has been provided to Axalta by its suppliers. Users should ensure that they are referring to the most current version of the SDS. Users are responsible for following the precautions identified in this SDS. It is the users' responsibility to comply with all laws and regulations applicable to the safe handling, use, and disposal of the product.

Users of Axalta products should read all relevant product information prior to use, and make their own determination as to the suitability of the products for their intended use. Except as otherwise required by applicable law, AXALTA MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. The information on this SDS relates only to the specific product identified in Section 1, Identification, and does not relate to its possible use in combination with any other material or in any specific process. If this product is to be used in combination with other products, Axalta encourages you to read and understand the SDS for all products prior to use.

Section 16. Other information

© 2026 Axalta Coating Systems, LLC and all affiliates. All rights reserved. Copies may be made only for those using Axalta Coating Systems products.