

SAFETY DATA SHEET

Section 1. Identification

Product identifier	: ARD4100
Product name	: ARD 4:1 CLEAR 1 US GAL
Date of issue	: 4/16/2025
Version	: 1
<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	: Test Info Phone
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 2 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms	:	  
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Signal word	: Danger
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Section 2. Hazards identification

Hazard statements	: H225 - Highly flammable liquid and vapor. H304 - May be fatal if swallowed and enters airways. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness. H351 - Suspected of causing cancer. H361 - Suspected of damaging fertility or the unborn child. H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure.
<u>Precautionary statements</u>	
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. P241 - Use explosion-proof electrical, ventilating or lighting equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.
Response	: P308 + P311 - IF exposed: Call a POISON CENTER or doctor. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. P362 + P364 - Take off contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing 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. P403 + P235 - Keep cool.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture		
XYLENE	CAS: 1330-20-7		≥10 - <25
REACTION MASS OF ETHYLBENZENE, M-XYLENE AND PXYLENE	CAS: --		≥10 - ≤22
methyl acetate	CAS: 79-20-9		≤10
acetone	CAS: 67-64-1		≤10
ethylbenzene	CAS: 100-41-4		≤5
n-butyl acetate	CAS: 123-86-4		≤5

Section 3. Composition/information on ingredients

Ethylene glycol butyl ether acetate	CAS: 112-07-2	≤2.6
4-methylpentan-2-one	CAS: 108-10-1	≤2.4
solvent naphtha (petroleum), light aromatic	CAS: 64742-95-6	≤1.6
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy-	CAS: 104810-48-2	≤0.3
ULTRAVIOLET ABSORBER	CAS: 104810-47-1	≤0.3
BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL) SEBACATE	CAS: 41556-26-7	≤0.3

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 required to be classified as hazardous to health or the environment under the reporting requirements for 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. If necessary, call a poison center or physician.
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.
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. If necessary, call a poison center or physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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.
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Section 4. First aid measures

- Inhalation** : Causes damage to organs following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

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
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- 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 : Highly 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

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.

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. Avoid exposure during pregnancy. 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 swallow. 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

: IA

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

XYLENE	CAL OSHA PEL (United States, 5/2018) [xylene] STEL 15 minutes: 655 mg/m³. STEL 15 minutes: 150 ppm. C: 300 ppm. TWA 8 hours: 435 mg/m³. TWA 8 hours: 100 ppm. OSHA PEL (United States, 5/2018) [Xylenes] TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m³. OSHA PEL 1989 (United States, 3/1989) [Xylenes (o-, m-, p-isomers)] TWA 8 hours: 100 ppm. TWA 8 hours: 435 mg/m³. STEL 15 minutes: 150 ppm. STEL 15 minutes: 655 mg/m³. ACGIH TLV (United States, 1/2024) [p-xylene and mixtures containing p-xylene] A4. Ototoxicant.
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Section 8. Exposure controls/personal protection

REACTION MASS OF ETHYLBENZENE, M-XYLENE AND PXYLENE
methyl acetate

acetone

ethylbenzene

- TWA 8 hours: 20 ppm.
- None.
- NIOSH REL (United States, 10/2020)**
- TWA 10 hours: 200 ppm.
- TWA 10 hours: 610 mg/m³.
- STEL 15 minutes: 250 ppm.
- STEL 15 minutes: 760 mg/m³.
- CAL OSHA PEL (United States, 5/2018)**
- STEL 15 minutes: 760 mg/m³.
- STEL 15 minutes: 250 ppm.
- TWA 8 hours: 610 mg/m³.
- TWA 8 hours: 200 ppm.
- OSHA PEL (United States, 5/2018)**
- TWA 8 hours: 200 ppm.
- TWA 8 hours: 610 mg/m³.
- OSHA PEL 1989 (United States, 3/1989)**
- TWA 8 hours: 200 ppm.
- TWA 8 hours: 610 mg/m³.
- STEL 15 minutes: 250 ppm.
- STEL 15 minutes: 760 mg/m³.
- ACGIH TLV (United States, 1/2024)**
- TWA 8 hours: 200 ppm.
- TWA 8 hours: 606 mg/m³.
- STEL 15 minutes: 250 ppm.
- STEL 15 minutes: 757 mg/m³.
- NIOSH REL (United States, 10/2020)**
- TWA 10 hours: 250 ppm.
- TWA 10 hours: 590 mg/m³.
- CAL OSHA PEL (United States, 5/2018)**
- STEL 15 minutes: 1780 mg/m³.
- STEL 15 minutes: 750 ppm.
- C: 3000 ppm.
- TWA 8 hours: 1200 mg/m³.
- TWA 8 hours: 500 ppm.
- OSHA PEL (United States, 5/2018)**
- TWA 8 hours: 1000 ppm.
- TWA 8 hours: 2400 mg/m³.
- OSHA PEL 1989 (United States, 3/1989)**
- TWA 8 hours: 750 ppm.
- TWA 8 hours: 1800 mg/m³.
- STEL 15 minutes: 1000 ppm.
- STEL 15 minutes: 2400 mg/m³.
- ACGIH TLV (United States, 1/2024) A4.**
- TWA 8 hours: 250 ppm.
- STEL 15 minutes: 500 ppm.
- NIOSH REL (United States, 10/2020)**
- TWA 10 hours: 100 ppm.
- TWA 10 hours: 435 mg/m³.
- STEL 15 minutes: 125 ppm.
- STEL 15 minutes: 545 mg/m³.
- CAL OSHA PEL (United States, 5/2018)**
- STEL 15 minutes: 130 mg/m³.
- STEL 15 minutes: 30 ppm.
- TWA 8 hours: 22 mg/m³.
- TWA 8 hours: 5 ppm.

Section 8. Exposure controls/personal protection

n-butyl acetate

OSHA PEL (United States, 5/2018)
TWA 8 hours: 100 ppm.
TWA 8 hours: 435 mg/m³.
OSHA PEL 1989 (United States, 3/1989)
TWA 8 hours: 100 ppm.
TWA 8 hours: 435 mg/m³.
STEL 15 minutes: 125 ppm.
STEL 15 minutes: 545 mg/m³.
ACGIH TLV (United States, 1/2024) A3.
Ototoxicant.
TWA 8 hours: 20 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, 5/2018)
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.

Ethylene glycol butyl ether acetate

NIOSH REL (United States, 10/2020)
TWA 10 hours: 5 ppm.
TWA 10 hours: 33 mg/m³.
ACGIH TLV (United States, 1/2024) A3.
TWA 8 hours: 20 ppm.

4-methylpentan-2-one

NIOSH REL (United States, 10/2020)
TWA 10 hours: 50 ppm.
TWA 10 hours: 205 mg/m³.
STEL 15 minutes: 75 ppm.
STEL 15 minutes: 300 mg/m³.
CAL OSHA PEL (United States, 5/2018)
STEL 15 minutes: 300 mg/m³.
STEL 15 minutes: 75 ppm.
TWA 8 hours: 205 mg/m³.
TWA 8 hours: 50 ppm.
OSHA PEL (United States, 5/2018)
TWA 8 hours: 100 ppm.
TWA 8 hours: 410 mg/m³.
OSHA PEL 1989 (United States, 3/1989)
TWA 8 hours: 50 ppm.
TWA 8 hours: 205 mg/m³.
STEL 15 minutes: 75 ppm.

Section 8. Exposure controls/personal protection

	STEL 15 minutes: 300 mg/m³. ACGIH TLV (United States, 1/2024) A3. TWA 8 hours: 20 ppm. STEL 15 minutes: 75 ppm.
solvent naphtha (petroleum), light aromatic	None.
Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy-	None.
ULTRAVIOLET ABSORBER	None.
BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDINYL) SEBACATE	None.

- 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.

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

Appearance

Physical state	: Liquid.
Color	: Clear.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point	: Technically not possible to measure
Boiling point	: 55 to 142°C (131 to 287.6°F)
Flash point	: Closed cup: -18°C (-0.4°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1% Upper: 16%
Vapor pressure	: 4.1 kPa (31.1 mm Hg)
Vapor density	: Not available.
Density	: 0.937 g/cm ³
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)): 2.8 mm ² /s (2.8 cSt)
Flow time (ISO 2431)	: Not available.

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
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Section 11. Toxicological information

XYLENE

Rat - Oral - LD50

4300 mg/kg

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

Rat - Inhalation - LC50 Gas.

5000 ppm [4 hours]

REACTION MASS OF ETHYLBENZENE, M-XYLENE AND PXYLENE

Rat - Male, Female - Oral - LD50

3523 mg/kg

EU B.1

Rabbit - Male - Dermal - LD50

12126 mg/kg

EU B.1

Rat - Male - Inhalation - LC50 Vapor

6350 ppm [4 hours]

EU B.2

methyl acetate

Rat - Oral - LD50

>5 g/kg

Rabbit - Dermal - LD50

>5 g/kg

acetone

Rat - Oral - LD50

5800 mg/kg

Toxic effects: Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Tremor

Rabbit - Dermal - LD50

2001 mg/kg

Rat - Inhalation - LC50 Vapor

21 mg/l [4 hours]

ethylbenzene

Rat - Oral - LD50

3500 mg/kg

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

Rabbit - Dermal - LD50

>5000 mg/kg

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]

Ethylene glycol butyl ether acetate

Rabbit - Dermal - LD50

1500 mg/kg

Toxic effects: Kidney, Ureter, and Bladder - Hematuria Kidney, 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]

4-methylpentan-2-one

Rat - Oral - LD50

2080 mg/kg

Section 11. Toxicological information

solvent naphtha (petroleum), light aromatic	Rat - Inhalation - LC50 Vapor
	16.4 mg/l [4 hours]
	Rat - Oral - LD50
	8400 mg/kg
	<u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Behavioral - Tremor Lung, Thorax, or Respiration - Other changes
	Rabbit - Dermal - LD50
	3492 mg/kg

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 %

Rabbit - Skin - Irritant

EU B.4

Duration of treatment/exposure: 4 hours

Observation period: 7 days

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 20 mg

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Rabbit - Skin - Mild irritant

Amount/concentration applied: 395 mg

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 15 mg

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

REACTION MASS OF ETHYLBENZENE, M-XYLENE AND PXYLENE

methyl acetate

acetone

ethylbenzene

4-methylpentan-2-one

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name

Result

Section 11. Toxicological information

XYLENE

Rabbit - Eyes - Mild irritant

Amount/concentration applied: 87 mg

Rabbit - Eyes - Severe irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 5 mg

methyl acetate

Rabbit - Eyes - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 mg

acetone

Human - Eyes - Mild irritant

Amount/concentration applied: 186300 ppm

Rabbit - Eyes - Mild irritant

Amount/concentration applied: 10 uL

Rabbit - Eyes - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 20 mg

4-methylpentan-2-one

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 20 mg

Rabbit - Eyes - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 uL

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 40 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

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.

Section 11. Toxicological information

Classification

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

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

XYLENE

REACTION MASS OF ETHYLBENZENE, M-XYLENE AND PXYLENE
methyl acetate

acetone

n-butyl acetate

4-methylpentan-2-one

solvent naphtha (petroleum), light aromatic

Result

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) -
Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Narcotic effects) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Narcotic effects) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Narcotic effects) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Respiratory tract irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

(Narcotic effects) - Category 3

Specific target organ toxicity (repeated exposure)

Product/ingredient name

REACTION MASS OF ETHYLBENZENE, M-XYLENE AND PXYLENE
ethylbenzene

Result

SPECIFIC TARGET ORGAN TOXICITY (REPEATED
EXPOSURE) - Category 2

SPECIFIC TARGET ORGAN TOXICITY (REPEATED
EXPOSURE) - Category 2

Aspiration hazard

Product/ingredient name

XYLENE

REACTION MASS OF ETHYLBENZENE, M-XYLENE AND PXYLENE
ethylbenzene

solvent naphtha (petroleum), light aromatic

Result

ASPIRATION HAZARD - Category 1

ASPIRATION HAZARD - Category 1

ASPIRATION HAZARD - Category 1

ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Not available.

Section 11. Toxicological information

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Causes damage to organs following a single exposure if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
- Skin contact** : Causes damage to organs following a single exposure in contact with skin. Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Causes damage to organs following a single exposure if swallowed. Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

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
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

Section 11. Toxicological information

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** : Suspected of damaging fertility or the unborn child.

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)
U-POL 4:1 NR PL CLEARCOAT (OPTS88)	8232.2	2672.0	26700.7	45.5	N/A
XYLENE	4300	1100	5000	N/A	N/A
REACTION MASS OF ETHYLBENZENE, M-XYLENE AND PXYLENE	3523	1100	N/A	11	N/A
acetone	5800	2001	N/A	21	N/A
ethylbenzene	3500	N/A	N/A	11	N/A
n-butyl acetate	10768	N/A	N/A	21.1	N/A
Ethylene glycol butyl ether acetate	1880	1500	N/A	11	N/A
4-methylpentan-2-one	2080	N/A	N/A	16.4	N/A
solvent naphtha (petroleum), light aromatic	8400	3492	N/A	N/A	N/A

Section 12. Ecological information

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses waterways.

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.

Section 14. Transport information

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

Additional information

DOT Classification : **Reportable quantity** 534.01 lbs / 242.44 kg [68.353 gal / 258.74 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

TSCA 12(b) - Chemical export notification

Not applicable.

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

SARA 304 RQ

SARA 304 RQ : Not applicable.

SARA 311/312

Section 15. Regulatory information

Classification : FLAMMABLE LIQUIDS - Category 2
 SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2A
 SKIN SENSITIZATION - Category 1
 CARCINOGENICITY - Category 2
 TOXIC TO REPRODUCTION - Category 2
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 ASPIRATION HAZARD - Category 1

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	XYLENE	1330-20-7	≥10 - <25
	ethylbenzene	100-41-4	≤5
	2-butoxyethyl acetate	112-07-2	≤2.6
	4-methylpentan-2-one	108-10-1	≤2.4
Supplier notification	XYLENE	1330-20-7	≥10 - <25
	ethylbenzene	100-41-4	≤5
	2-butoxyethyl acetate	112-07-2	≤2.6
	4-methylpentan-2-one	108-10-1	≤2.4

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.

Inventory list

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

Section 16. Other information

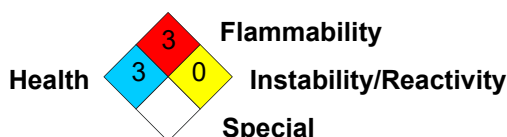
Hazardous Material Information System (U.S.A.)

Health	*	4
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.)



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Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of issue : 4/16/2025

Version : 1

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.

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