

SAFETY DATA SHEET

1. Identification

Product identifier: P-XYLENE

Other means of identification

Product No.: X528, 9498

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name: Avantor Performance Materials, Inc.
Address: 3477 Corporate Parkway, Suite 200
Center Valley, PA 18034

Telephone: Customer Service: 855-282-6867

Fax:
Contact Person: Environmental Health & Safety
e-mail: info@avantormaterials.com

Emergency telephone number:

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard classification

Physical hazards

Flammable liquids Category 3

Health hazards

Acute toxicity (Oral) Category 4

Acute toxicity (Inhalation - vapor) Category 4

Skin corrosion/irritation Category 2

Environmental hazards

Acute hazards to the aquatic environment Category 2

Label elements

Hazard symbol:



Signal word:

Warning

Hazard statement: Flammable liquid and vapor.
Harmful if swallowed.
Harmful if inhaled.
Causes skin irritation.
Toxic to aquatic life.

Precautionary statement

Prevention: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment (see this label).

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients

Substances

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
P-XYLENE		106-42-3	90 - 100%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

Ingestion: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin contact: Wash with soap and water. If skin irritation occurs: Get medical advice/attention. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: Irritating to eyes, respiratory system and skin.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed. Treat symptomatically.

5. Fire-fighting measures

General fire hazards: Flammable liquid and vapor.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Heat may cause the containers to explode.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Keep upwind. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. See Section 8 of the MSDS for Personal Protective Equipment.

Methods and material for containment and cleaning up: Eliminate all ignition sources if safe to do so. Take precautionary measures against static discharges. Stop leak if possible without any risk. Use only non-sparking tools. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Stop leak if you can do so without risk. Inform authorities if large amounts are involved.

Environmental precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities: Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a cool, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source
P-XYLENE	STEL	150 ppm	US. ACGIH Threshold Limit Values (02 2012)
	TWA	100 ppm	US. ACGIH Threshold Limit Values (02 2012)
	STEL	150 ppm 655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	100 ppm 435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	100 ppm 435 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	150 ppm 655 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm 435 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Biological limit values

Chemical identity	Exposure Limit values	Source
P-XYLENE (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEL (02 2012)

Appropriate engineering controls No data available.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin protection
Hand protection: Chemical resistant gloves

Other:	Wear suitable protective clothing.
Respiratory protection:	In case of inadequate ventilation use suitable respirator.
Hygiene measures:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

9. Physical and chemical properties

Appearance

Physical state:	Liquid
Form:	Liquid
Color:	Colorless
Odor:	Aromatic odor
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	12 °C
Initial boiling point and boiling range:	138 °C
Flash Point:	27 °C (Closed Cup)
Evaporation rate:	9.9 ether=1 0.7 n-butyl acetate=1
Flammability (solid, gas):	Class IC Flammable Liquid

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):	7.0 %(V)
Flammability limit - lower (%):	1.1 %(V)
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.

Vapor pressure:	1.18 kPa (25 °C)
Vapor density:	3.7 AIR=1
Relative density:	0.86 (20 °C)

Solubility(ies)

Solubility in water:	Insoluble in water
Solubility (other):	No data available.

Partition coefficient (n-octanol/water):	3.15
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Auto-ignition temperature:	528 °C
Decomposition temperature:	No data available.
Viscosity:	No data available.

Other information

Molecular weight:	106.16 g/mol (C ₈ H ₁₀)
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10. Stability and reactivity

Reactivity:	No dangerous reaction known under conditions of normal use.
Chemical stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Heat, sparks, flames. Contact with incompatible materials.
Incompatible materials:	Strong acids. Strong oxidizing agents.

Hazardous decomposition products:

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information**Information on likely routes of exposure**

Ingestion:	Harmful if swallowed.
Inhalation:	May cause irritation to the respiratory system. Harmful if inhaled.
Skin contact:	Causes skin irritation.
Eye contact:	May cause irritation.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

Oral Product:	No data available.
Dermal Product:	No data available.
Inhalation Product:	LC 50 (Mouse, 6 h): 3,900 mg/l
Repeated dose toxicity Product:	No data available.

Skin corrosion/irritation

Product:	Causes skin irritation.
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Serious eye damage/eye irritation

Product:	May irritate eyes.
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Respiratory or skin sensitization

Product:	Not a skin sensitizer.
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Carcinogenicity

Product:	No data available.
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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro Product:	No mutagenic components identified
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In vivo Product:	No mutagenic components identified
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Reproductive toxicity

Product:	No data available.
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Specific target organ toxicity - single exposure

Product: None known.

Specific target organ toxicity - repeated exposure

Product: None known.

Aspiration hazard

Product: Not classified

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

P-XYLENE

LC 50 (Rainbow trout, donaldson trout (*Oncorhynchus mykiss*), 96 h): 2.6 mg/l Mortality
LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 7.2 - 9.9 mg/l Mortality

Aquatic invertebrates

Product: No data available.

Specified substance(s):

P-XYLENE

LC 50 (Brine shrimp (*Artemia* sp.), 24 h): 22.1 - 39.4 mg/l Mortality
LC 50 (Water flea (*Daphnia magna*), 48 h): 11.3 - 51.8 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and degradability

Biodegradation

Product: There are no data on the degradability of this product.

BOD/COD ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)

Product: No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)

Product: Log Kow: 3.15

Mobility in soil: No data available.

Other adverse effects: Toxic to aquatic life.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number:	UN 1307
UN proper shipping name:	Xylenes
Transport hazard class(es)	
Class(es):	3
Label(s):	3
Packing group:	III
Marine Pollutant:	No

IMDG

UN number:	UN 1307
UN proper shipping name:	XYLENES
Transport hazard class(es)	
Class(es):	3
Label(s):	3
EmS No.:	F-E, S-D
Packing group:	III
Marine Pollutant:	No

IATA

UN number:	UN 1307
Proper Shipping Name:	Xylenes
Transport hazard class(es):	
Class(es):	3
Label(s):	3
Marine Pollutant:	No
Packing group:	III

15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

P-XYLENE Reportable quantity: 100 lbs.

Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories

☒ Acute (Immediate) ☐ Chronic (Delayed) ☒ Fire ☐ Reactive ☐ Pressure Generating

SARA 302 Extremely hazardous substance

None present or none present in regulated quantities.

SARA 304 Emergency release notification

Chemical identity	RQ
P-XYLENE	100 lbs.

SARA 311/312 Hazardous chemical

Chemical identity	Threshold Planning Quantity
P-XYLENE	500 lbs

SARA 313 (TRI reporting)

Chemical identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing
P-XYLENE	10000 lbs	25000 lbs.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

P-XYLENE Reportable quantity: 100 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US state regulations
US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

P-XYLENE Listed

US. Massachusetts RTK - Substance List

P-XYLENE Listed

US. Pennsylvania RTK - Hazardous Substances

P-XYLENE Listed

US. Rhode Island RTK

P-XYLENE Listed

Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 09-11-2014

Revision date: No data available.

Version #: 1.0

Further information: No data available.

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