

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830
SDS Reference Number: PC2400882
Issue date: 15/07/2024 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Trade name : P-Xylene
Chemical name : para-XYLENE
EC Index-No. : 601-022-00-9
EC-No. : 203-396-5
CAS-No. : 106-42-3
REACH registration No. : 01-2119484661-33-0024
Type of product : aromatic hydrocarbons
Formula : C₈H₁₀

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Main use category : Use as an intermediate
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Manufacture of Substance. Distribution of Substance. Use as an Intermediate. Use in Formulations. Use in Coatings. Use in Cleaning. Use in Oilfield drillings and Production operations. Use in Binders. Use in Agrochemicals. Use as a Fuel. Use as a Laboratories. Use in Rubber Production.

Uses advised against

Restrictions on use : Anything other than the above

1.3. Details of the supplier of the safety data sheet

Manufacturer

GADIV PETROCHEMICAL INDUSTRIES LTD
P.O. Box 4
3100001 Haifa
Israel
T +972-4-8788020, F +972-4-8788018
Gadiv@bazan.co.il, www.bazan.co.il

1.4. Emergency telephone number

Emergency number : +972-4-8788512; Environment Incident Notification center 24-HOUR: *5799

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226
Acute toxicity (inhal.), Category 4 H332
Acute toxicity (dermal), Category 4 H312
Skin corrosion/irritation, Category 2 H315

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS02

GHS07

Signal word (CLP)

: Warning

Hazard statements (CLP)

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

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground and bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P261 - Avoid breathing mist, spray, vapours.
P264 - Wash hands thoroughly after handling.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : P-Xylene
CAS-No. : 106-42-3
EC-No. : 203-396-5
EC Index-No. : 601-022-00-9

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
p-xylene	CAS-No.: 106-42-3 EC-No.: 215-535-7 EC Index-No.: 601-022-00-9	< 100	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Acute Tox. 4 (Dermal), H312 (ATE=1000 mg/kg bodyweight) Skin Irrit. 2, H315

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor. Specific measures (see supplemental first aid instruction on this label). Wash with plenty of water/... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Causes skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.
Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools.

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

p-xylene (106-42-3)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	220 mg/m ³
	50 ppm
WEL STEL (OEL STEL)	441 mg/m ³
	100 ppm
WEL chemical category	Potential for cutaneous absorption

8.2. Exposure controls

Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Chemical goggles or safety glasses

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear protective gloves

Respiratory protection

Respiratory protection:

Wear appropriate mask

Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Aromatic.
Odour threshold	: Not available
Melting point	: 13.2 °C
Freezing point	: Not available
Boiling point	: 138 – 139 °C
Flammability	: 0.9% - 7% Flammable liquid and vapour.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 27 – 32 Typical: 24°C
Auto-ignition temperature	: 463 – 528 °C
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 0.581 – 0.76 mPa·s at 25°C
Solubility	: Water: 146 – 171 mg/l at 25°C
Partition coefficient n-octanol/water (Log Kow)	: Not available
Partition coefficient n-octanol/water (Log Pow)	: 3.12 – 3.2
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 0.86 – 0.87 g/cm ³ at 15°C
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Harmful in contact with skin.
Acute toxicity (inhalation) : Harmful if inhaled.

p-xylene (106-42-3)	
LD50 oral rat	4029 mg/kg (Source: JAPAN_GHS)
LD50 dermal rabbit	1000 – 2000 mg/kg
LC50 Inhalation - Rat	10 – 20 mg/l/4h
LC50 Inhalation - Rat [ppm]	4740 ppm/4h
ATE CLP (oral)	4029 mg/kg bodyweight
ATE CLP (dermal)	1000 mg/kg bodyweight
ATE CLP (gases)	4740 ppmv/4h
ATE CLP (vapours)	10 mg/l/4h
ATE CLP (dust,mist)	1.5 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified
Additional information : Based on available data, the classification criteria are not met
Respiratory or skin sensitisation : Not classified
Additional information : Based on available data, the classification criteria are not met
Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Carcinogenicity : Not classified
Additional information : Based on available data, the classification criteria are not met

p-xylene (106-42-3)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met
Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : No additional information available

Other information

Potential Adverse human health effects and symptoms : Harmful in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

Hazardous to the aquatic environment, long-term (chronic) : Not classified

p-xylene (106-42-3)	
LC50 - Fish [1]	7.2 – 9.9 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
LC50 - Fish [2]	2.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: EPA)
EC50 - Crustacea [1]	3.55 – 6.31 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 72h - Algae [1]	3.2 mg/l (Species: Pseudokirchneriella subcapitata [static])

12.2. Persistence and degradability

P-Xylene (106-42-3)	
Persistence and degradability	Not established.

p-xylene (106-42-3)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

P-Xylene (106-42-3)	
Partition coefficient n-octanol/water (Log Pow)	3.12 – 3.2
Bioaccumulative potential	Not established.

p-xylene (106-42-3)	
BCF - Fish [1]	(2.2 dimensionless)
Partition coefficient n-octanol/water (Log Pow)	3.2 (at 20 °C (at pH 7))

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : No information available.

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, national regulation.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecological waste information : Avoid release to the environment.






SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1307	UN 1307	UN 1307	UN 1307	UN 1307
14.2. UN proper shipping name				
XYLENES	XYLENES	Xylenes	XYLENES	XYLENES
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-E EmS-No. (Spillage): S-D	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
 Limited quantities (ADR) : 5I
 Excepted quantities (ADR) : E1
 Packing instructions (ADR) : P001, IBC03, LP01, R001
 Mixed packing provisions (ADR) : MP19
 Portable tank and bulk container instructions (ADR) : T2
 Portable tank and bulk container special provisions (ADR) : TP1
 Tank code (ADR) : LGBF
 Vehicle for tank carriage : FL
 Transport category (ADR) : 3
 Special provisions for carriage - Packages (ADR) : V12
 Special provisions for carriage - Operation (ADR) : S2
 Hazard identification number (Kemler No.) : 30
 Orange plates :



Tunnel restriction code (ADR) : D/E
 EAC code : 3Y

Transport by sea

Special provisions (IMDG) : 223
 Limited quantities (IMDG) : 5 L
 Excepted quantities (IMDG) : E1
 Packing instructions (IMDG) : P001, LP01
 IBC packing instructions (IMDG) : IBC03
 Tank instructions (IMDG) : T2
 Tank special provisions (IMDG) : TP1
 Stowage category (IMDG) : A

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

Flash point (IMDG) : 23°C to 30°C c.c.
Properties and observations (IMDG) : Colourless liquids. Flashpoint: 23°C to 30°C c.c. Explosive limits: 1.1% to 7%. Immiscible with water.

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y344
PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L
Special provisions (IATA) : A3
ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : F1
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions (RID) : TP1
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	P-Xylene ; p-xylene
3(b)	P-Xylene ; p-xylene
40.	P-Xylene ; p-xylene

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

P-Xylene

Safety Data Sheet

according to UK REACH/ according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 2015/830

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Sources of Key data : Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (et sequens). Supplier information. Manufacturer Information. ECHA (European Chemicals Agency). GB CLP. CLP Inventory.

Other information : None.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H332	Harmful if inhaled.
Skin Irrit. 2	Skin corrosion/irritation, Category 2

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.