HYDRANAL™Xylene

37866-1L

Version 1.6 Revision Date 06.11.2025

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

1.1. Product identifier

Product name	:	HYDRANAL™Xylene
SDS-number	:	000000020639
Type of product	:	Substance
Remarks	:	SDS according to Art. 31 of Regulation (EC) 1907/2006. In accordance to the Article 14 (1) of the REACh Regulation (EC) No 1907/2006, exposure estimation and risk characterisation is not required.
Chemical name	:	o-xylene
Index-No.	:	601-022-00-9

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

Use of the Substance/Mixture	:	Laboratory chemicals
Uses advised against	:	none

1.3. Details of the supplier of the safety data sheet

Company	:	Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 30926 Seelze Germany	Solstice Advanced Materials US, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	:	(49) 5137-999 0	
For further information, please contact:	:	SafetyDataSheet@solstice.com	

1.4. Emergency telephone number

Emergency telephone number	:	+1-703-527-3887 (ChemTrec-Transport) +1 303-739-1378 (Medical)

: Poison Control Center:
United Kingdom: (+44) 844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Flammable liquids Category 3
H226 Flammable liquid and vapour.
Aspiration hazard Category 1
H304 May be fatal if swallowed and enters airways.
Acute toxicity Category 4 - Dermal
H312 Harmful in contact with skin.
Skin irritation Category 2
H315 Causes skin irritation.
Eye irritation Category 2
H319 Causes serious eye irritation.
Acute toxicity Category 4 - Inhalation
H332 Harmful if inhaled.
Specific target organ toxicity - single exposure Category 3 - Respiratory system
H335 May cause respiratory irritation.
Long-term (chronic) aquatic hazard Category 3
H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms :



Signal word : Danger

Hazard statements :

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312 + H332	Harmful in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	:	P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
		P280	Wear protective gloves/protective clothing/eye protection/face protection.
		P284	In case of inadequate ventilation wear respiratory protection.
		P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
		P302 + P352	IF ON SKIN: Wash with plenty of water.
		P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P308 + P313	IF exposed or concerned: Get medical advice/ attention.

2.3. Other hazards

Vapours may form explosive mixtures with air. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Causes headache, drowsiness or other effects to the central nervous system. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. Product does not contain substances that are persistent, mobile, and toxic (PMT/vPvM) at levels of 0.1 % or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS-No. Index-No. EC-No.	Classification 1272/2008	Concentration	Remarks
o-xylene	95-47-6 601-022-00-9	Flam. Liq. 3; H226 Acute Tox. 4; H332; Inhalation	100 %	

	202-422-2	Acute Tox. 4; H312; Dermal Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Asp. Tox. 1; H304 Aquatic Chronic 3; H412		

3.2. Mixtures

Not applicable

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation:
Remove to fresh air. Keep patient warm and at rest. Call a physician.

Skin contact:
Wash off immediately with plenty of water. If skin irritation persists, call a physician.

Eye contact:
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Protect unharmed eye.

Ingestion:
Never give anything by mouth to an unconscious person. Rinse mouth with water. Drink 1 or 2 glasses of water. Do NOT induce vomiting. Call a physician immediately.

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

No data available

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

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms. :

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Foam
Carbon dioxide (CO2)
Dry powder

Extinguishing media which shall not be used for safety reasons:
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Flammable.
Vapours may form explosive mixtures with air.
Vapours are heavier than air and may spread along floors.
Vapors may travel to areas away from work site before igniting/flashing back to vapor source.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons must be kept away. Ensure adequate ventilation. Remove all sources of ignition.

6.2. Environmental precautions

Should not be released into the environment. Do not allow run-off from fire fighting to enter drains or water courses.

6.3. Methods and materials for containment and cleaning up

Ventilate the area.
Do not use sparking tools.

Use explosion-proof equipment.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:
Wear personal protective equipment. Use only in well-ventilated areas.

Advice on protection against fire and explosion:
Keep product and empty container away from heat and sources of ignition. No smoking. Take precautionary measures against static discharges. Vapours may form explosive mixtures with air.

Hygiene measures:
Take off all contaminated clothing immediately. Recommended preventive skin protection When using do not eat or drink. Wash hands before breaks and at the end of workday. Avoid contact with the skin and the eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:
Keep only in the original container, tightly closed, in a well ventilated place. Store at room temperature. (Ambient temperature: > 0 < 35°C) Protect from atmospheric moisture and water.

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
o-xylene	EU ELV SKIN_DES			Can be absorbed through the skin.
o-xylene	EH40 WEL TWA	220 mg/m3 50 ppm		
o-xylene	EH40 WEL SKIN_DES			Can be absorbed through the skin.
o-xylene	EH40 WEL			Listed
o-xylene	EU ELV STEL	442 mg/m3 100 ppm		Indicative
o-xylene	EU ELV TWA	221 mg/m3 50 ppm		Indicative
o-xylene	EH40 WEL STEL	441 mg/m3 100 ppm	15 minutes	

EU ELV - EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended
SKIN_DES - Skin designation:
EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
TWA - Time weighted average
EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
-
EU ELV - EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended
STEL - Short term exposure limit

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
o-xylene	Workers / Long-term systemic effects		221 mg/m3	Inhalation	

o-xylene	Workers / Acute systemic effects		442 mg/m3	Inhalation	
o-xylene	Workers / Long-term local effects		221 mg/m3	Inhalation	
o-xylene	Workers / Acute local effects		442 mg/m3	Inhalation	
o-xylene	Workers / Long-term systemic effects		3182mg/kg bw/d	Skin contact	
o-xylene	Consumers / Long-term systemic effects		65,3 mg/m3	Inhalation	
o-xylene	Consumers / Acute systemic effects		260 mg/m3	Inhalation	
o-xylene	Consumers / Long-term local effects		65,3 mg/m3	Inhalation	
o-xylene	Consumers / Acute local effects		260 mg/m3	Inhalation	
o-xylene	Consumers / Long-term systemic effects		1872mg/kg bw/d	Skin contact	
o-xylene	Consumers / Long-term systemic effects		12,5mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks

o-xylene	Fresh water: 0,25 mg/l	
o-xylene	Marine water: 0,25 mg/l	
o-xylene	Sewage treatment plant: 5 mg/l	
o-xylene	Fresh water sediment: 14,33 mg/kg dw	
o-xylene	Marine sediment: 14,33 mg/kg dw	
o-xylene	Soil: 2,41 mg/kg dw	

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.
Ensure that eyewash stations and safety showers are close to the workstation location.
Do not breathe vapours or spray mist.

Engineering measures
Use with local exhaust ventilation.
Prevent vapour buildup by providing adequate ventilation during and after use.

Personal protective equipment
Respiratory protection:
In the case of vapour formation use a respirator with an approved filter.

Hand protection:
Glove material: Fluorinated rubber
Break through time: 480 min
Glove thickness: 0,7 mm
Vitoject® 890
Gloves must be inspected prior to use.
Replace when worn.

Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.
Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer reccomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.
Manufacturer´s directions for use should be observed because of great diversity of types .
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:
Safety goggles

Skin and body protection:
Protective suit

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state	:	liquid
(b) Colour	:	colourless
(c) Odour	:	aromatic
(d) Melting point/freezing point	:	-25 °C
(e) Boiling point/boiling range	:	143 - 145 °C at 1.013 hPa
(g) Lower and upper explosion limit	:	Lower explosion limit 1,7 %(V)
	:	Upper explosion limit 7,6 %(V)

(h) Flash point	:	32 °C at 1.013 hPa
(i) Auto-ignition temperature	:	465 °C
(j) Decomposition temperature	:	At normal pressure may be distilled without decomposition.
(k) pH	:	No data available
(l) Viscosity, kinematic	:	No data available
(m) Solubility(ies)	:	Water solubility: 171 mg/l at 25 °C slightly soluble
(n) Partition coefficient: n-octanol/water	:	log Pow 3,12 at: 20 °C
(o) Vapour pressure	:	0,67 hPa at 20 °C
(p) Density and / or relative density	:	0,88 g/cm3 at 20 °C
(q) Relative vapour density	:	No data available
(r) Particle characteristics	:	No data available

9.2 Other Information

Polymer characteristics	:	No data available
Evaporation rate	:	No data available
Viscosity, dynamic	:	0,76 mPa.s

at 25 °C

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

At normal pressure may be distilled without decomposition.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Strong oxidizing agents
Formation of explosive gas/air mixtures.

10.6. Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

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

(a) Acute toxicity

Acute oral toxicity:
LD50
Species: Rat
Sex: male
Value: 3.523 mg/kg
Method: EC Directive 92/69/EEC B.1 Acute Toxicity (Oral)

Acute dermal toxicity:
Classification based on Annex VI of regulation 1272/2008/EC.

Acute inhalation toxicity:
Classification based on Annex VI of regulation 1272/2008/EC.

Acute toxicity (other routes of administration):
No data available

(b) Skin corrosion/irritation:
Classification based on Annex VI of regulation 1272/2008/EC.

(c) Serious eye damage/eye irritation:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

(d) Respiratory or skin sensitisation:
Not classified due to data which are conclusive although insufficient for classification.

(e) Germ cell mutagenicity:
Note: Not classified due to data which are conclusive although insufficient for classification.

(f) Carcinogenicity:
Note: Not classified due to data which are conclusive although insufficient for classification.

(g) Reproductive toxicity:
Remarks: Not classified due to data which are conclusive although insufficient for classification.

(h) STOT-single exposure:
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

(i) STOT - repeated exposure:
No data available
STOT - repeated exposure:
Remarks: No data available

(j) Aspiration hazard:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

11.2. Information on other hazards

Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other information:
Solvent removes skin oil from the skin.
Solvent vapours have a narcotic effect if inhaled in high concentrations.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Toxicity to aquatic plants:
EC50
Growth rate
Species: Pseudokirchneriella subcapitata (green algae)
Value: 2,2 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to Microorganisms:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Toxicity to aquatic invertebrates:
Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6. Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

Should not be released into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:
Dispose according to legal requirements.

Packaging:
Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:
Provisions relating to waste:
EC Directive 2006/12/EC; 2008/98/EEC
Regulation No. 1013/2006
For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number or ID number
ADR/RID:1307 IMDG:1307 IATA:1307

14.2 UN proper shipping name
ADR/RID:XYLENES
IMDG:XYLENES
IATA:Xylenes

14.3 Transport hazard class(es)
ADR/RID:3 IMDG: 3 IATA: 3

14.4 Packaging group
ADR/RID:III IMDG: III IATA: III

14.5 Environmental hazards
ADR/RID:no Marine pollutant: no

14.6 Special precautions for user
No data available

14.7 Maritime transport in bulk according to IMO instruments
No data available

SECTION 15: Regulatory information

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

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of ≥ 0.1 % (w/w).

Other inventory information

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

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

H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

Further information

All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:
EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very biaccumulative substance
PBT Persistent, bioaccmulative und toxic substance

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.
This information should not constitute a guarantee for any specific product properties.
This document is not a UK REACH-compliant SDS, and the Great Britain importer bears full responsibility for UK REACH compliance. This document is provided to assist the Great Britain importers in ensuring their own compliance.