

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 11-Jun-2009 Revision Date 12-Sep-2025 **Revision Number** 6

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THECOMPANY/UNDERTAKING

1.1. Product identifier

Product Description: Xylenes Cat No.: 16371

Svnonvms Dimethylbenzene **Index No** 601-022-00-9 **CAS No** 1330-20-7 Molecular Formula C8 H10

REACH registration number

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

Recommended Use Laboratory chemicals

Sector of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

PC21 - Laboratory chemicals **Product category**

PROC15 - Use as a laboratory reagent **Process categories**

ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) **Environmental release category**

Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company

Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific)

Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom

Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608

E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No. US:001-800-424-9300 / Europe:001-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Flammable liquids Category 3 (H226)

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Health hazards

Aspiration Toxicity

Acute dermal toxicity

Acute Inhalation Toxicity - Vapors

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity - (single exposure)

Specific target organ toxicity - (repeated exposure)

Category 1 (H304)

Category 4 (H312)

Category 4 (H332)

Category 2 (H315)

Category 2 (H319)

Category 3 (H335)

Specific target organ toxicity - (repeated exposure)

Category 2 (H373)

Environmental hazards

Chronic aquatic toxicity Category 3 (H412)

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Danger

Hazard Statements

- H226 Flammable liquid and vapor
- 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
- H373 May cause damage to organs through prolonged or repeated exposure
- H412 Harmful to aquatic life with long lasting effects

Precautionary Statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P331 Do NOT induce vomiting
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

2.3. Other hazards

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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3.1. Substances

Component	CAS No	EC No	Weight %	GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Xylenes (o-, m-, p- isomers)	1330-20-7	EEC No. 215-535-7	>75	Flam. Liq. 3 (H226) Asp. Tox. 1 (H304) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 2 (H373) Aquatic Chronic 3 (H412)
Ethylbenzene	100-41-4	EEC No. 202-849-4	<25	Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Acute Tox. 4 (H332) STOT RE 2 (H373) Aquatic Chronic 3 (H412)

Note

REACH: EC No. 905-588-0

Reaction mass of ethylbenzene and xylene: Reach Registration Number 01-2119488216-32

REACH registration number	•

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Call

a physician or poison control center immediately. If vomiting occurs naturally, have victim

lean forward.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur. Risk of serious damage to the lungs (by aspiration).

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness,

nausea and vomiting

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

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Notes to Physician Treat symptomatically. Symptoms may be delayed.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must 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. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO2).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

Hygiene Measures

When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

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7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat, sparks and flame.

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany) Class 3

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

EH40 RCP = 275 mg/m^3

UK - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

	Component	The United Kingdom	European Union	Ireland
Ī	Xylenes (o-, m-, p- isomers)	STEL: 100 ppm 15 min	TWA: 50 ppm (8h)	TWA: 50 ppm 8 hr.
-		STEL: 441 mg/m ³ 15 min	TWA: 221 mg/m ³ (8h)	TWA: 221 mg/m ³ 8 hr.
-		TWA: 50 ppm 8 hr	STEL: 100 ppm (15min)	STEL: 100 ppm 15 min
-		TWA: 220 mg/m ³ 8 hr	STEL: 442 mg/m ³ (15min)	STEL: 442 mg/m ³ 15 min
		Skin	Skin	Skin
	Ethylbenzene	STEL: 125 ppm 15 min	TWA: 100 ppm (8h)	TWA: 100 ppm 8 hr.
-		STEL: 552 mg/m ³ 15 min	TWA: 442 mg/m ³ (8h)	TWA: 442 mg/m ³ 8 hr.
-		TWA: 100 ppm 8 hr	STEL: 200 ppm (15min)	STEL: 200 ppm 15 min
-		TWA: 441 mg/m ³ 8 hr	STEL: 884 mg/m ³ (15min)	STEL: 884 mg/m ³ 15 min
١		Skin	Skin	Skin

Biological limit values

List source(s): **UK** - Biological Monitoring Guidance Values provided by the UK's Health and Safety Executive (HSE) Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended) and EH40/2005.

Component	United Kingdom	European Union
Xylenes (o-, m-, p- isomers)	Methyl hippuric acid: 650 mmol/mol	
	creatinine urine post shift	

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

Workers; See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Xylenes (o-, m-, p- isomers)				DNEL = 212mg/kg
1330-20-7 (>75)				bw/day
Ethylbenzene				DNEL = 180mg/kg
100-41-4 (<25)				bw/day
				DNEL = 212mg/kg
				bw/day

Component	Acute effects local	Acute effects	Chronic effects local	Chronic effects
_	(Inhalation)	systemic (Inhalation)	(Inhalation)	systemic (Inhalation)

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	Xylenes (o-, m-, p- isomers)	DNEL = 442mg/m^3	$DNEL = 442mg/m^3$	DNEL = 221mg/m^3	$DNEL = 221mg/m^3$
L	1330-20-7 (>75)		,	-	-
Γ	Ethylbenzene	DMEL = 884mg/m ³	$DMEL = 884mg/m^3$	$DMEL = 442mg/m^3$	$DMEL = 442mg/m^3$
1	100-41-4 (<25)	DNEL = 293mg/m^3	$DNEL = 442 mg/m^3$	$DNEL = 221 mg/m^3$	$DNEL = 77mg/m^3$
L		$DNEL = 442 mg/m^3$,	-	$DNEL = 221 mg/m^3$

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Xylenes (o-, m-, p-	PNEC = 0.327mg/L	PNEC =	PNEC = 0.327mg/L	PNEC = 6.58mg/L	PNEC = 2.31 mg/kg
isomers)		12.46mg/kg			soil dw
1330-20-7 (>75)		sediment dw			
Ethylbenzene	PNEC = 0.327mg/L	PNEC =	PNEC = 0.327mg/L	PNEC = 6.58mg/L	PNEC = 2.31 mg/kg
100-41-4 (<25)		12.46mg/kg			soil dw
		sediment dw			

Component	Marine water	Marine water	Marine water	Food chain	Air
		sediment	intermittent		
Xylenes (o-, m-, p-	PNEC = 0.327mg/L	PNEC =			
isomers)		12.46mg/kg			
1330-20-7 (>75)		sediment dw			
Ethylbenzene	PNEC = 0.327mg/L	PNEC =			
100-41-4 (<25)		12.46mg/kg			
. ,		sediment dw			

8.2. Exposure controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Goggles (European standard - EN 166)

Hand Protection Protective gloves

Glove material Viton (R)	Breakthrough time > 480 minutes	Glove thickness	EU standard Level 6 EN 374	Glove comments As tested under EN374-3 Determination of Resistance to Permeation by Chemicals
Nitrile rubber Neoprene gloves	< 41 minutes	0.38 mm 0.45 mm		•

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

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Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Organic gases and vapours filter Type A Brown conforming to

EN14387

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure Small scale/Laboratory use

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

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When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls Prevent product from entering drains. Do not allow material to contaminate ground water

system. Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Liquid

Appearance Colorless Odor aromatic

No data available **Odor Threshold** -34 °C / -29.2 °F Melting Point/Range **Softening Point** No data available

Boiling Point/Range 137 - 143 °C / 278.6 - 289.4 °F

Flammable Flammability (liquid) On basis of test data

Flammability (solid,gas) Not applicable Liquid

Explosion Limits Lower 1.1 vol% Upper 7 vol%

Flash Point 25 °C / 77 °F

Method - No information available

460 °C / 860 °F **Autoignition Temperature Decomposition Temperature** No data available рΗ Not applicable 0.6 mPa s @ 20 °C Viscosity **Water Solubility** 0.2 g/l water (20°C)

practically insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Xylenes (o-, m-, p- isomers) 3.15 Ethylbenzene 3.6

Vapor Pressure 8 mbar @ 20 °C

Density / Specific Gravity 0.865

Not applicable **Bulk Density** Liquid **Vapor Density** No data available (Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

C8 H10 **Molecular Formula Molecular Weight** 106 17

Explosive Properties explosive air/vapour mixtures possible

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

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None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met

DermalCategory 4InhalationCategory 4

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xylenes (o-, m-, p- isomers)	LD50 = 3500 mg/kg (Rat)	LD50 > 4350 mg/kg (Rabbit)	29.08 mg/L [MOE Risk
			Assessment Vol.1, 2002]
Ethylbenzene	3500 mg/kg (Rat)	15400 mg/kg (Rabbit)	17.2 mg/L (Rat) 4 h

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

Con	nponent	EU	UK	Germany	IARC
Ethy	lbenzene				Group 2B

(g) reproductive toxicity; No data available

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(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system.

(i) STOT-repeated exposure; Category 2

Target Organs Heart, Liver, Kidney, Ears.

(j) aspiration hazard; Category 1

Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. delayed

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11.2. Information on other hazards

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Ecotoxicity effects

The product contains following substances which are hazardous for the environment.

Contains a substance which is:. Very toxic to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Xylenes (o-, m-, p- isomers)	LC50: 30.26 - 40.75 mg/L, 96h static (Poecilia reticulata) LC50: = 780 mg/L, 96h semi-static (Cyprinus carpio) LC50: 23.53 - 29.97 mg/L, 96h static (Pimephales promelas) LC50: > 780 mg/L, 96h (Cyprinus carpio) LC50: 7.711 - 9.591 mg/L, 96h static (Lepomis macrochirus) LC50: = 19 mg/L, 96h (Lepomis macrochirus) LC50: 13.1 - 16.5 mg/L, 96h flow-through (Lepomis macrochirus) LC50: 13.5 - 17.3 mg/L, 96h (Oncorhynchus mykiss) LC50: 2.661 - 4.093 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 13.4 mg/L, 96h flow-through (Pimephales promelas)	LC50: = 0.6 mg/L, 48h (Gammarus lacustris) EC50: = 3.82 mg/L, 48h (water flea)	
Ethylbenzene	LC50: 9.1 - 15.6 mg/L, 96h static (Pimephales promelas) LC50: 11.0 - 18.0 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 4.2 mg/L, 96h semi-static (Oncorhynchus mykiss) LC50: 7.55 - 11 mg/L, 96h flow-through (Pimephales promelas) LC50: = 32 mg/L, 96h static (Lepomis macrochirus)	(Daphnia magna)	EC50: 2.6 - 11.3 mg/L, 72h static (Pseudokirchneriella subcapitata) EC50: 1.7 - 7.6 mg/L, 96h static (Pseudokirchneriella subcapitata) EC50: > 438 mg/L, 96h (Pseudokirchneriella subcapitata) EC50: = 4.6 mg/L, 72h (Pseudokirchneriella subcapitata)

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Xylenes

LC50: = 9.6 mg/L, 96h static (Poecilia reticulata)
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Component	Microtox	M-Factor
Xylenes (o-, m-, p- isomers)	EC50 = 0.0084 mg/L 24 h	
Ethylbenzene	EC50 = 9.68 mg/L 30 min	
	EC50 = 96 mg/L 24 h	

12.2. Persistence and degradability Expected to be biodegradable

Persistence

Insoluble in water, Persistence is unlikely, based on information available.

Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste

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water treatment plants.

12.3. Bioaccumulative potential

May have some potential to bioaccumulate

Component	log Pow	Bioconcentration factor (BCF)
Xylenes (o-, m-, p- isomers)	3.15	0.6 - 15 dimensionless
Ethylbenzene	3.6	15 dimensionless

12.4. Mobility in soil

Spillage unlikely to penetrate soil The product is insoluble and floats on water The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Will likely be mobile in the environment due to its volatility. Is not likely mobile in the environment due its low water solubility.

12.5. Results of PBT and vPvB

No data available for assessment.

assessment

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects **Persistent Organic Pollutant Ozone Depletion Potential**

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused

Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

Other Information

Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Can be landfilled or incinerated, when in

compliance with local regulations.

Xylenes

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number UN1307 14.2. UN proper shipping name XYLENES

14.3. Transport hazard class(es) 3 14.4. Packing group III

ADR

14.1. UN number UN1307 14.2. UN proper shipping name XYLENES

14.3. Transport hazard class(es) 3 14.4. Packing group III

IATA

14.1. UN number UN1307 14.2. UN proper shipping name XYLENES

14.3. Transport hazard class(es) 3 14.4. Packing group III

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Xylenes (o-, m-, p- isomers)	1330-20-7	215-535-7	-	-	Х	Х	KE-35427	X	Х
Ethylbenzene	100-41-4	202-849-4	-	-	Х	Х	KE-13532	Х	Х

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Xylenes (o-, m-, p- isomers)	1330-20-7	Х	ACTIVE	Х	-	Χ	X	X
Ethylbenzene	100-41-4	Х	ACTIVE	Х	-	Χ	Х	Х

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) -	REACH (1907/2006) -	REACH Regulation (EC
·		Annex XIV - Substances	Annex XVII - Restrictions	1907/2006) article 59 -
		Subject to Authorization	on Certain Dangerous	Candidate List of
			Substances	Substances of Very High

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Xylenes

				Concern (SVHC)
Xylenes (o-, m-, p- isomers)	1330-20-7	-	Use restricted. See entry	-
			75.	
			(see link for restriction	
			details)	

REACH links

https://echa.europa.eu/substances-restricted-under-reach

Seveso III Directive (2012/18/EC)

Ethylbenzene

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Xylenes (o-, m-, p- isomers)	1330-20-7	Not applicable	Not applicable
Ethylbenzene	100-41-4	Not applicable	Not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

100-41-4

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

Water endangering class = 2 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Xylenes (o-, m-, p- isomers)	WGK2	
Ethylbenzene	WGK1	

Component	France - INRS (Tables of occupational diseases)
Xylenes (o-, m-, p- isomers)	Tableaux des maladies professionnelles (TMP) - RG 4bis,RG 84
Ethylbenzene	Tableaux des maladies professionnelles (TMP) - RG 84

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Xylenes (o-, m-, p- isomers) 1330-20-7 (>75)	Prohibited and Restricted Substances	Group II	
Ethylbenzene 100-41-4 (<25)	Prohibited and Restricted Substances	Group I	

15.2. Chemical safety assessment

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Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H304 - May be fatal if swallowed and enters airways

H312 - Harmful in contact with skin

H332 - Harmful if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H373 - May cause damage to organs through prolonged or repeated exposure

H225 - Highly flammable liquid and vapor

H226 - Flammable liquid and vapor

H412 - Harmful to aquatic life with long lasting effects

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b)

Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration PBT - Persistent. Bioaccumulative. Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association**

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards On basis of test data **Health Hazards** Calculation method **Environmental hazards** Calculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Health, Safety and Environmental Department **Prepared By**

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This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

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End of Safety Data Sheet