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ALFAAL10902

4-Vinylphenol, min 10% soln. in propylene glycol

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明:	4-乙烯基苯酚
Product Description:	4-Vinylphenol, min 10% soln. in propylene glycol
Cat No. :	L10902
Molecular Formula	C8 H8 O
Supplier	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
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
E-mail address	begel.sdsdesk@thermofisher.com
Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

SECTION 2. HAZARD IDENTIFICATION

Physical State	Appearance	Odor
Liquid	No information available	No information available
	Emergency Overview spected of damaging fertility or the unborn olonged or repeated exposure. Hygroscopi	

Classification of the substance or mixture

Germ Cell Mutagenicity	Category 2
Reproductive Toxicity	Category 2
Specific target organ toxicity - (repeated exposure)	Category 1

Label Elements



Signal Word

Danger

Hazard Statements

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H341 - Suspected of causing genetic defects

H361 - Suspected of damaging fertility or the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary Statements

Prevention

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P308 + P313 - IF exposed or concerned: Get medical advice/attention

Storage

P403 - Store in a well-ventilated place

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Physical and Chemical Hazards

Hygroscopic.

Health Hazards

Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

This product does not contain any known or suspected endocrine disruptors.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
1,2-Propylene glycol	57-55-6	90
Phenol, 4-ethenyl-	2628-17-3	10

SECTION 4. 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.

Inhalation

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

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

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.

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Notes to Physician

Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions 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

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required.

Environmental Precautions

Should not be released into the environment.

Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Flammables area. Store under an inert atmosphere. Protect from moisture. To maintain product quality: Keep refrigerated.

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Component	ACGIH TLV	OSHA PEL	NIOSH	The United Kingdom	European Union
1,2-Propylene glycol				STEL: 450 ppm 15 min	
				STEL: 1422 mg/m ³ 15	
				min	
				STEL: 30 mg/m ³ 15	
				min	
				TWA: 150 ppm 8 hr	
				TWA: 474 mg/m ³ 8 hr	
				TWA: 10 mg/m ³ 8 hr	

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Exposure Controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. 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	Breakthrough time	Glove thickness	EU standard	Glove comments
Viton (R)	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			

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.

Skin and body protection	Long sleeved clothing
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
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
Small scale/Laboratory use	Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141 When RPE is used a face piece Fit Test should be conducted
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State	Liquid	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas)	No information available No data available No information available No data available No data available 189 °C / 372.2 °F No information available No data available Not applicable	@ 760 mmHg Method - No information available Liquid

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Explosion Limits No data	available
Vapor Pressure No data	available
Vapor Density No data	available (Air = 1.0)
Specific Gravity / Density 1.039	
Bulk Density Not appl	cable Liquid
Water Solubility No inform	nation available
Solubility in other solvents No inform	nation available
Partition Coefficient (n-octanol/water)	
Component log Pow	
1,2-Propylene glycol -0.9	
Phenol, 4-ethenyl- 2.3	
Autoignition Temperature No data	available
Decomposition Temperature No data	available
Viscosity No data	available
Explosive Properties No inform	nation available
Oxidizing Properties No inform	nation available
Molecular Formula C8 H8 O	
Molecular Weight 120.16	

SECTION 10. STABILITY AND REACTIVITY

Stability	Hygroscopic.
Hazardous Reactions Hazardous Polymerization	None under normal processing. Hazardous polymerization does not occur.
Conditions to Avoid	Incompatible products. Excess heat. Exposure to moist air or water. Keep away from open flames, hot surfaces and sources of ignition.
Materials to avoid	Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

(a) acute toxicity; Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1,2-Propylene glycol	LD50 = 20 g/kg (Rat)	LD50 = 20800 mg/kg (Rabbit)	
(b) skin corrosion/irritation;	No data available		
(c) serious eye damage/irritation;	No data available		
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available		
(e) germ cell mutagenicity;	Category 2		
	Mutagenic effects have occu	rred in experimental animals	

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(f) carcinogenicity;	No data available There are no known carcinogenic chemicals in this product
(g) reproductive toxicity;	Category 2
Reproductive Effects	Product is or contains a chemical which is a known or suspected reproductive hazard.
(h) STOT-single exposure;	No data available
(i) STOT-repeated exposure;	Category 1
Target Organs	Kidney, Bladder.
(j) aspiration hazard;	No data available
Symptoms / effects,both acute and	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

delayed

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
1,2-Propylene glycol	LC50: = 51600 mg/L, 96h static (Oncorhynchus mykiss) LC50: 41 - 47 mL/L, 96h static (Oncorhynchus mykiss) LC50: = 51400 mg/L, 96h static (Pimephales promelas) LC50: = 710 mg/L, 96h (Pimephales promelas)		EC50: = 19000 mg/L, 96h (Pseudokirchneriella subcapitata)	= 710 mg/L EC50 Photobacterium phosphoreum 30 min

Persistence and Degradability	No information available
Persistence	Persistence is unlikely.

Bioaccumulative Potential

Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
1,2-Propylene glycol	-0.9	<1 dimensionless
Phenol, 4-ethenyl-	2.3	No data available

Mobility in soil

No information available

Endocrine Disruptor Information

Component	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information			
Phenol, 4-ethenyl-	Group III Chemical					
Persistent Organic Pollutant	This product does not contain any known or suspected substance					
Ozone Depletion Potential	This product does not contain any known or suspected substance					

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SECTION 13. DISPOSAL CONSIDERATIONS

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.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not flush to sewer.
	SECTION 14. TRANSPORT INFORMATION
Road and Rail Transport	Not Regulated

IMDG/IMO	Not regulated
IMDG/IMO	Not regulated

IATA Not regulated

Special Precautions for User

No special precautions required

SECTION 15. REGULATORY INFORMATION

International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

Component		List of dangerous goods GB 12268 - 2012	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
1,2-Propylene glycol	-	-	Х	Х	200-338-0	Х	Х	Х	Х	Х	Х	KE-29267
Phenol, 4-ethenyl-	-	-	Х	Х	220-103-6	-	-	Х	Х	Х	Х	-

National Regulations

SECTION 16. OTHER INFORMATION

Prepared By
Creation Date
Revision Date
Revision Summary

Health, Safety and Environmental Department 04-Nov-2010 08-May-2024 New emergency telephone response service provider.

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.

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

Legend

POW - Partition coefficient Octanol:Water

Dangerous Goods Code

ATE - Acute Toxicity Estimate

VOC - (Volatile Organic Compound)

Ships

vPvB - very Persistent, very Bioaccumulative

IMO/IMDG - International Maritime Organization/International Maritime

MARPOL - International Convention for the Prevention of Pollution from

CAS - Chemical Abstracts Service	TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical 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	
WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%	TWA - Time Weighted Average IARC - International Agency for Research on Cancer PNEC - Predicted No Effect Concentration LD50 - Lethal Dose 50% EC50 - Effective Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

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

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

OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

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

Disclaimer

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

End of Safety Data Sheet