



Revision date: 23.06.2023

Polyvinyl-Lactophenol

Product code: 3C-259

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Polyvinyl-Lactophenol

UFI: 8F3Y-R2Y3-K00H-81E1

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

Use as laboratory reagent

1.3. Details of the supplier of the safety data sheet

Company name:	Waldeck GmbH & Co KG	
	Division Chroma	
Street:	Havixbecker Str. 62	
Place:	D-48161 Münster	
Post-office box:	410180	
	D-48065 Münster	
Telephone:	+49(0)2534/9700	Telefax: +49(0)2534/970258
E-mail:	labor1@waldeck-ms.de	
Contact person:	Dr. Wolfgang Schröder	Telephone: +49(0)2534/970-212
E-mail:	labor1@waldeck-ms.de	
Responsible Department:	Labor	
	Mo. – Do.: 08.00 – 17.00 Uhr, Fr.: 08.00 – 15.00 Uhr	
	labor1@waldeck-ms.de	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Acute Tox. 4; H302
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Muta. 2; H341

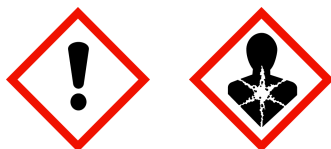
Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

2,2,2-trichloroethane-1,1-diol, chloral hydrate
Phenol, liquid

Signal word: Warning

Pictograms:

**Hazard statements**

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing
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protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

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.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
302-17-0	2,2,2-trichloroethane-1,1-diol, chloral hydrate			10 - < 15 %
	206-117-5			
	Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2; H301 H315 H319			
108-95-2	Phenol, liquid			1 - < 5 %
	203-632-7			
	Muta. 2, Acute Tox. 2, Acute Tox. 3, Acute Tox. 4, Skin Corr. 1B, STOT RE 2; H341 H330 H311 H302 H314 H373			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
302-17-0	206-117-5	2,2,2-trichloroethane-1,1-diol, chloral hydrate	10 - < 15 %
	dermal: LD50 = 3030 mg/kg; oral: LD50 = 479 mg/kg		
108-95-2	203-632-7	Phenol, liquid	1 - < 5 %
	inhalation: ATE = 0,5 mg/l (vapours); inhalation: LC50 = 0,316 mg/l (dusts or mists); dermal: LD50 = 669 mg/kg; oral: LD50 = 317 mg/kg		

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Hazardous combustion products

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**Other information**

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations.



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Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Use as laboratory reagent

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL
108-95-2	Phenol	2	7.8		TWA (8 h)	WEL
		4	16		STEL (15 min)	WEL

8.2. Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	viscous	
Colour:	light yellow	
Odour:	Phenol	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not determined
		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined

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Flash point:	not applicable
Decomposition temperature:	not determined
pH-Value (at 20 °C):	3,0
Water solubility:	easily soluble
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	1,12 g/cm ³
Relative vapour density:	not determined

9.2. Other information**Information with regard to physical hazard classes**

Self-ignition temperature

Solid:

not determined

Gas:

not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

Harmful if swallowed.

ATEmix calculated

ATE (oral) 818,0 mg/kg; ATE (dermal) 29087 mg/kg; ATE (inhalation vapour) 21,74 mg/l; ATE (inhalation dust/mist) 13,74 mg/l



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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
302-17-0	2,2,2-trichloroethane-1,1-diol, chloral hydrate				
	oral	LD50 479 mg/kg	Rat		
	dermal	LD50 3030 mg/kg	Rat		
108-95-2	Phenol, liquid				
	oral	LD50 317 mg/kg	Rat		
	dermal	LD50 669 mg/kg	Rat		
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,316 mg/l	Rat		

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (Phenol, liquid)

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

11.2. Information on other hazards

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.



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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
302-17-0	2,2,2-trichloroethane-1,1,1-diol, chloral hydrate					
	Acute bacteria toxicity	(EC50 500 mg/l)		Daphnia magna (Big water flea)		
108-95-2	Phenol, liquid					
	Acute fish toxicity	LC50 5,0 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 229 mg/l	72 h		GESTIS	
	Fish toxicity	NOEC 4^ mg/l	14 d	Poecilia reticulata (Guppy)	OECD 204	
	Acute bacteria toxicity	(EC50 786 mg/l)				

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
302-17-0	2,2,2-trichloroethane-1,1,1-diol, chloral hydrate	0,99

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number or ID number:**

UN 2821

14.2. UN proper shipping name:

PHENOL SOLUTION

14.3. Transport hazard class(es):

6.1



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14.4. Packing group:

Hazard label:

II

6.1



Classification code:

T1

Limited quantity:

100 mL

Excepted quantity:

E4

Transport category:

2

Hazard No:

60

Tunnel restriction code:

D/E

Inland waterways transport (ADN)**14.1. UN number or ID number:**

UN 2821

14.2. UN proper shipping name:

PHENOL SOLUTION

14.3. Transport hazard class(es):

6.1

14.4. Packing group:

II

Hazard label:

6.1



Classification code:

T1

Special Provisions:

802

Limited quantity:

100 mL

Excepted quantity:

E4

Marine transport (IMDG)**14.1. UN number or ID number:**

UN 2821

14.2. UN proper shipping name:

PHENOL SOLUTION

14.3. Transport hazard class(es):

6.1

14.4. Packing group:

II

Hazard label:

6.1



Special Provisions:

-

Limited quantity:

100 mL

Excepted quantity:

E4

EmS:

F-A, S-A

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number or ID number:**

UN 2821

14.2. UN proper shipping name:

PHENOL SOLUTION

14.3. Transport hazard class(es):

6.1

14.4. Packing group:

II

Hazard label:

6.1



Special Provisions:

A3

Limited quantity Passenger:

1 L

Passenger LQ:

Y641

Excepted quantity:

E4

IATA-packing instructions - Passenger:

654



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IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	662
IATA-max. quantity - Cargo:	60 L

14.6. Special precautions for user

No information available.

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 regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): 25 % (280 g/l)

Additional information

To follow: 850/2004/EC, 1107/2009/EC, 649/2012/EC.

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
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Water hazard class (D):	2 - obviously hazardous to water
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15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 11.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

Eye Irrit: Eye irritation

Muta: Germ cell mutagenicity

STOT RE: Specific target organ toxicity - repeated exposure

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Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Muta. 2; H341	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H341	Suspected of causing genetic defects.
H373	May cause damage to organs through prolonged or repeated exposure.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)