



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Divinyl benzene, high purity **Molecular Formula:** C₁₀H₁₀
Catalog Number: M-280
Company: Scientific Polymer Products, Inc.
6265 Dean Parkway
Ontario, NY 14519
Telephone: 585/265-0413
Fax: 585/265-1390
Website: www.scipoly.com
Emergency Phone Number: 800-255-3924 (CHEM TEL)

Section 2: Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids, Category 4, H227
Skin irritation, Category 2, H315
Eye irritation, Category 2A, H320
Skin sensitization, Category 1, H317
Reproductive toxicity, Category 2, H361
Specific target organ toxicity- single exposure, Category 3, Respiratory system, H335

GHS Label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard statement(s)

H227 Combustible liquid.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340+P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor/physician/if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish.
P403+P233	Store in a well ventilated place. Keep container tightly closed.
P403+P235	Store in a well ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS – none

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

Section 3: Composition/Information on Ingredients

Ingredient	CAS Number	Concentration (%)
Divinyl benzene, high purity	1321-74-0	80
Benzene, ethenylethyl-	28106-30-1	19
4-tert-butylcatechol	98-29-3	>=900-<=1,100ppm

Section 4: First Aid Measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire-Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
Keep away from sources of ignition-No smoking. Take measure to prevent the buildup of electrostatic charge.
For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature 2-8° C

Light sensitive

Storage class (TRGS 510): Combustible liquids

Storage stability

Storage temperature:

4° C (39° F)

4 -10° C (39-50° F)

10-16° C (50-61° F)

16-21° C (61-70° F)

21-27° C (70-81° F)

Storage Period:

12 Month

8 Month

4 Month

2 Month

1 Month

Aerate within:

6 Month

6 Month

4 Month

2 Month

1 Month

Specific end use(s)

Laboratory chemicals, Manufacture of substances

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

Component	CAS No.	Value	Control parameters	Basis
Divinyl benzene	1321-74-0	TWA	10.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks		Upper Respiratory Tract Irritation	
		TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)

			Upper Respiratory Tract Irritation	
		TWA	10 ppm 50 mg/m ³	USA. NIOSH Recommended Exposure Limits
		Commercial product contains all 3 isomers, but m-isomer predominates. Usually contains an inhibitor to prevent polymerization		
		PEL	10 ppm 50 mg/m ³	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
4-tert-Butylpyrocatechol	98-29-3	CEIL	2 mg/m ³	USA. Workplace Environmental Exposure Levels (WEEL)
			Skin Dermal Sensitization Notation	

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage of spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a)	Appearance	Form: Liquid
b)	Odor	Aromatic
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	< -50° C (-58° F)
f)	Initial boiling point and boiling range	200° C (392° F)
g)	Flash point	Closed cup 70 ° C (158 ° F) Tag Closed Cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Flammability or explosive limits	
	Upper	No data available
	Lower	No data available

k)	Vapor pressure	0.6 mmHg @ 25° C (77° F)
l)	Vapor density	No data available
m)	Relative density	0.917 25° C (77° F)
n)	Water solubility	0.0052% at 25 ° C (77 ° F)
o)	Partition coefficient: n- octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

Other safety information

No data available

Section 10: Stability and Reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions. Elevated temperatures can cause hazardous polymerization.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Oxidizing agents, Acids, Metal halides. Avoid contact with metals such as Brass, Copper. Avoid unintended contact with peroxides.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions- Carbon oxides
Other decomposition products- no data available. In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

Oral: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

LD50, Rat > 2,000 mg/kg OECD 401 or equivalent

Inhalation: LC50, Rat, 4 Hour, vapor > 30.8 mg/l

Dermal: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

LD50, Rabbit, male and female, 8,000 mg/kg OECD Test Guideline 402

Skin corrosion/irritation

Prolonged contact may cause slight skin irritation with local redness. Repeated contact may cause skin burns.

Symptoms may include pain, severe local redness, swelling and tissue damage.

Serious eye damage/eye irritation

May cause slight eye irritation. May cause pain disproportionate to the level of irritation to eye tissues. Corneal injury is unlikely.

Respiratory or skin sensitization

Has demonstrated the potential for contact allergy in mice.

Germ cell mutagenicity

No data available

Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation

Route of Exposure: Inhalation

Specific target organ toxicity - repeated exposure

In animals, effects have been reported on the following organs:

Liver, Kidney, Respiratory tract

Aspiration hazard

No data available

Additional Information

No data available

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

Section 12: Ecological Information**Toxicity**

- | | |
|---|---|
| Acute toxicity to fish | Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/l in the most sensitive species tested) |
| Acute toxicity to aquatic Invertebrates | EC50, Daphnia magna (Water flea), flow-through test, 48 Hour, 0.69 mg/l
OECD Test Guideline 202 or equivalent |

Persistence and degradability

Biodegradability: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

10-day Window: Fail

Biodegradation: 0%

Exposure time: 35 d

Method: OECD Test Guideline 301F or Equivalent

Bioaccumulative potential

Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5)

Partition coefficient: n-octanol/water (log Pow): 3.80 Estimated

Bioconcentration factor (BCF): 320 Cyprinus carpio (Carp) Measured

Mobility in soil

Potential for mobility in soil is low (Koc between 500 and 2000)

Partition coefficient (Koc): 9.33 Estimated

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

Section 13: Disposal Considerations

Waste treatment methods

Product

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional and national hazardous waste regulations to ensure complete and accurate classification.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

DOT (US)

UN number: 1993 Class: NONE Packing group: III
Proper shipping name: Combustible liquid, n.o.s. (Divinyl benzene)
Poison Inhalation Hazard: No

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15: Regulatory Information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Divinyl benzene, high purity	CAS No. 1321-74-0
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Pennsylvania Right To Know Components

Divinyl benzene, high purity	CAS No. 1321-74-0
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New Jersey Right To Know Components

Divinyl benzene, high purity	CAS No. 1321-74-0
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California Prop. 65 Components

This product does not contain any chemicals known to the state of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

HMIS Rating

Health:	2
Flammability:	2
Reactivity:	0

NFPA Rating

Health:	2
Flammability:	2
Reactivity:	0

This material is intended for laboratory use only. It is not sold or intended for drug, household or other uses. The information represents the most accurate and complete data currently available to us. However, we make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.