# SAFETY DATA SHEET

Version 4.5 Revision Date 06/02/2016 Print Date 08/05/2018

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Poly(3,4-ethylenedioxythiophene)-

poly(styrenesulfonate)

Product Number : 655201 Brand : Aldrich

CAS-No. : 155090-83-8

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

### 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Skin corrosion (Category 1A), H314 Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram

T.

Signal word Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

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

protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated

clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

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

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

Synonyms: Poly(2,3-dihydrothieno-1,4-dioxin)-poly(styrenesulfonate)

PEDOT/PSS

#### **Hazardous components**

Component		Classification	Concentration		
Ethylene glycol					
CAS-No.	107-21-1	Acute Tox. 4; STOT RE 2;	>= 5 - < 10 %		
EC-No.	203-473-3	H302, H373			
Index-No.	603-027-00-1				
Registration number	01-2119456816-28-XXXX				
Benzenesulfonic acid, ethenyl-, homopolymer, compd. with 2,3-dihydrothieno[3,4-b]-1,4-dioxin					
homopolymer					
CAS-No.	155090-83-8	Skin Corr. 1B; Eye Dam. 1;	>= 1 - < 5 %		
		H314			

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 4. FIRST AID MEASURES

#### 4.1 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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Continue rinsing eyes during transport to hospital. 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.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

#### 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

## Suitable extinguishing media

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

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## 5.2 Special hazards arising from the substance or mixture

No data available

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

#### 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

## 6.2 Environmental precautions

Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

### 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

For precautions see section 2.2.

## 7.2 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

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
	Remarks	See Appendix D - Substances with No Established RELs		
Ethylene glycol	107-21-1	С	100.00000	USA. ACGIH Threshold Limit Values
			mg/m3	(TLV)
		Eye & Upper Respiratory Tract irritation Not classifiable as a human carcinogen		t irritation
		С	100.000000	USA. ACGIH Threshold Limit Values
			mg/m3	(TLV)
		Upper Respiratory Tract irritation Eye irritation Not classifiable as a human carcinogen		
		С	100 mg/m3	USA. ACGIH Threshold Limit Values
				(TLV)
		Upper Respiratory Tract irritation Eye irritation Adopted values or notations enclosed are those for which changes		on
		are proposed in the NIC See Notice of Intended Changes (NIC)		
		Not classifiable as a human carcinogen		rcinogen

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	С	100 mg/m3	California permissible exposure limits for chemical contaminants
			(Title 8, Article 107)

Hazardous components without workplace control parameters

## 8.2 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, 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 multipurpose 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

Do not let product enter drains.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: liquid	
b)	Odour	No data available	
c)	Odour Threshold	No data available	
d)	рН	2 at 20 °C (68 °F)	
e)	Melting point/freezing point	No data available	
f)	Initial boiling point and boiling range	No data available	
g)	Flash point	> 100 °C (> 212 °F)	
h)	Evaporation rate	No data available	
i)	Flammability (solid, gas)	No data available	
j)	Upper/lower flammability or explosive limits	No data available	
k)	Vapour pressure	No data available	
l)	Vapour density	No data available	
m)	Relative density	1 g/mL at 20 °C (68 °F)	
n)	Water solubility	No data available	
o)	Partition coefficient: n-octanol/water	No data available	

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p) Auto-ignition No data available temperature

q) Decomposition temperature

No data available

r) Viscosity No data available
 s) Explosive properties No data available
 t) Oxidizing properties No data available

## 9.2 Other safety information

No data available

#### 10. STABILITY AND REACTIVITY

## 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

# 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - Carbon oxides

In the event of fire: see section 5

# 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

### **Acute toxicity**

Inhalation: No data available Dermal: No data available

No data available

## Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

## Respiratory or skin sensitisation

No data available

## 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.

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.

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## Reproductive toxicity

No data available

No data available

# Specific target organ toxicity - single exposure

No data available

### Specific target organ toxicity - repeated exposure

No data available

## **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: Not available

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system - Irregularities - Based on Human Evidence

Central nervous system - Irregularities - Based on Human Evidence (Ethylene glycol)

### 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

No data available

### 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

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

### 12.6 Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

#### Product

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

# Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

DOT (US)

UN number: 3265 Class: 8 Packing group: III

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (Benzenesulfonic acid, ethenyl-, homopolymer, compd.

with 2,3-dihydrothieno[3,4-b]-1,4-dioxin homopolymer)

Reportable Quantity (RQ):

Poison Inhalation Hazard: No

**IMDG** 

UN number: 3265 Class: 8 Packing group: III EMS-No: F-A, S-B

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Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Benzenesulfonic acid, ethenyl-, homopolymer, compd. with 2,3-dihydrothieno[3,4-b]-1,4-dioxin homopolymer)

IATA

UN number: 3265 Class: 8 Packing group: III

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (Benzenesulfonic acid, ethenyl-, homopolymer, compd.

with 2,3-dihydrothieno[3,4-b]-1,4-dioxin homopolymer)

### 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**

The following components are subject to reporting levels established by SARA Title III, Section 313:

Ethylene glycol CAS-No. Revision Date 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components** 

Ethylene glycol CAS-No. Revision Date 2007-07-01

Pennsylvania Right To Know Components

CAS-No. Revision Date

Water 7732-18-5

Ethylene glycol 107-21-1 2007-07-01

Benzenesulfonic acid, ethenyl-, homopolymer, compd. with 2,3- 155090-83-8

dihydrothieno[3,4-b]-1,4-dioxin homopolymer

**New Jersey Right To Know Components** 

CAS-No. Revision Date

Water 7732-18-5

Ethylene glycol 107-21-1 2007-07-01

Benzenesulfonic acid, ethenyl-, homopolymer, compd. with 2,3- 155090-83-8

dihydrothieno[3,4-b]-1,4-dioxin homopolymer

California Prop. 65 Components

WARNING: This product contains a chemical known to the CAS-No. Revision Date State of California to cause birth defects or other reproductive 107-21-1 2015-06-19

harm.

Ethylene glycol

#### 16. OTHER INFORMATION

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

Acute Tox. Acute toxicity

Eye Dam. Serious eye damage H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H373 May cause damage to organs (/\$/\* ORG REP ORAL/\$/) through prolonged or

repeated exposure if swallowed.

Skin Corr. Skin corrosion

STOT RE Specific target organ toxicity - repeated exposure

**HMIS Rating** 

Health hazard: 3
Chronic Health Hazard: \*

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Flammability: 0 Physical Hazard 0

**NFPA Rating** 

Health hazard: 3
Fire Hazard: 0
Reactivity Hazard: 0

## **Further information**

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## **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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