



Safety Data Sheet
According to Regulation (EC) No 1907/2006 (REACH)

Product: liquid polysulphide polymer

Reference: SD00199/02

Revision date: 18/05/15

1. Identification of the substance/preparation and of the company/undertaking

1.1. Identification of the substance or preparation: polymer

Identification on the label/trade name: liquid polysulphide polymer NVB-2

REACH registration No: -

1.2. Use of substance/preparation:

Liquid polysulphide polymer NVB-2 is used for paste curing at temperature of 5 to 30 °C, mastic and sealant production, for the construction purposes also.

1.3. Company/undertaking identification:

SUPPLIER

	Euram Chemicals Ltd
Street/PO Box no	P O Box 346
Post code/city	Marlow SL7 1WH
Telephone	44 (0) 1628 472848
Fax no	44 (0) 1628 890095
Emergency information	44 (0) 7785 267921

2. Hazards identification

Non-hazardous

2.1. On humans:

Under normal conditions polysulphide polymers don't affect human organism.

By thermal decomposition above 93 °C polysulphide polymer vapors of volatiles containing hydrogen sulphide may be generated, directly affecting central nervous system. Unburnt combustibles may contain dioxide sulphide irritating respiratory tract. Treatment rules violation can cause polymer to contact:

- skin,
- eye mucous membranes,
- digestive apparatus,
- respiratory tract.

Indication:

- on skin: irritation,
- on eye mucous membranes: irritation,
- on digestive apparatus: identified as low hazard substance,
- respiratory tract: endurance to physical activity is decreasing.

On environment:

When treated, stored and transported properly liquid polysulphide polymer doesn't present any harm to environment. Under normal conditions doesn't form toxic bonds with elements in air, doesn't dissolve in water and form toxic bonds with elements in water.

If storage or transportation rules are violated soil and water objects pollution can happen.

Pollution indication:

Soil: accumulation is possible after unorganized burning of product and in accidental release by product of thermal destruction (hydrogen sulphide, dioxide sulphide).

Influence indication: specific smell.

3. Composition/information on ingredients:

Chemical name	CAS No.	EC No.	Index No	REACH Registration No.	Value (%)	Classification		Remarks
						Hazards characteristics	R-phrases	
Sodium polysulphide	1344-08-7	215-686-9			12,3			
Bis(2-chloroethoxy)methane	203-920-2	111-91-1			60			
Sodium hydroxide	1310-73-2	215-185-5			27,7			

4. First aid measures:

4.1. Recommended first aid measures: sterilized gauze, sterilized cotton and sterilized paper towels.

4.2. In case of inhalation:

Measures - move affected person into fresh air, loosen clothing and allow to rest, consult a physician.

4.3. In case of skin contact:

Measures – After cleaning contaminated parts with a paper towel flush the affected skin area with plenty of water with soap.

4.4. In case of eye contact:

Measures - After cleaning eyes with a paper towel flush the affected skin area with plenty of water with soap.

4.5. In case of ingestion:

Measures – Call a physician immediately and show him label.

4.6. Self-protection of the first-aider:

4.7. Information to physician: in case of ingestion gastric lavage is recommended.

5. Fire-fighting measures.

5.1. Suitable extinguishing media: all types.

5.2. Extinguishing media that must not be used for safety reasons: not discovered.

5.3. Special exposure hazards arising from the combustion products: smoke, sulphur dioxide, hydrogen sulphide and other combustion products. Inhalation of the combustion products is extremely hazardous to human health.

5.4. Special protective equipment for fire-fighters: standard protective clothing. Specific character of fire-fighting process is not discovered.

6. Accidental release measures.

6.1. Personal precautions:

Use personal protection equipment (cotton suit, rubber gloves).

6.2. Environmental precautions:

In case of accidental release: cover contaminated area with sand then scoop up and transfer to industrial waste site.

6.3. Accident management:

Emergency measures

General procedures:

- Evacuate the danger zone within a radius of 200 meters,
- Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of the accident.
- Follow fire safety regulations
- Use personal protective equipment and clothing.

Fire-fighting measures:

- First person who noticed fire gives fire alarm signal,
- Stop the process, alert the security services,
- Remove personnel from danger zone
- Start extinguishing the fire on its own means using individual protection before arrival of firefighters.

6.4. Additional information:

To prevent fire:

- Avoid unorganized combustion of product,
- Eliminate use of open flame or other ignition sources.

General recommendations to prevent emergencies:

- Use ventilation,
- Use power grounded equipment,
- Use of antistatic equipment,
- Follow product storage conditions (at temperature from -20 to +40 ° C, protected from sunlight, rainfall, acid vapors and alkalis),
- Avoid unorganized placement, dumping, incineration of wastes and disposal into water and ground.

7. HANDLING AND STORAGE

Safety measures when handling the product:

- Use ventilation,
- Use of power grounded equipment
- Use of antistatic equipment,
- Avoid contact with open flame,
- During utilization use personal protective equipment.

7.1. Handling.

Liquid polysulfide polymers to be transported in closed vehicles of any kind in accordance with shipping rules, applying to particular type of transport. When transported liquid polysulfide polymers must be protected from direct sunlight and rainfall as well as acid vapors, alkalis and other aggressive agents.

7.2. Storage.

Safe storage conditions: storage facilities should have temperature from -20 to +40 ° C. When stored liquid polysulfide polymer must be protected from direct sunlight and rainfall as well as acid vapors, alkalis and other aggressive agents.

Incompatible materials for storage: acids, alkalis, aggressive agents.

Materials recommended as container: metal flasks, steel drums.

Container: rail tank, truck tank.

The level of filling of tank is calculated taking into account cargo capacity and volumetric expansion of product during possible temperature changes en route.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Exposure limit values

Occupational exposure limits for liquid polysulfide polymer have not been determinate.

8.2.1. Occupational exposure controls:

- Use ventilation,
- Use personal protection equipment (cotton suit, rubber gloves).
- Do not let the product inside the body,
- Organize medical examinations upon receipt and the periodic preventive medical examinations.

8.2.2. Environmental exposure controls

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information

Appearance: viscous homogeneous liquid of dark colors with green or brown shades.

Odor: There is a peculiar odor.

9.2. Important health, safety and environmental information

1) flash point: 232 ° C;

2) ignition temperature: 246 ° C;

3) oxidative properties: can be oxidized by oxygen, hydroperoxides, dioximes and polynitroxide compounds

4) solubility in water: insoluble.

5) solubility: soluble in benzene, toluene by hexalnethylene. Not soluble in aliphatic solvents, lower alcohol and acid, ethylene glycol, glycerin.

6) density: 1,29-1,30 g/cm³.

7) viscosity at 25 ° C: 7,5 - 11,0 Pa. sec.

pH: no information

Boiling point / boiling range: no information

Flammability (solid, gaseous): no information

Explosive properties: no information

Steam pressure: no information

Distributed ratio: n- octanol /water: no information

Vapor Density: no information

The rate of evaporation: no information

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid

Liquid polysulfide polymer is stable under conditions of storage and operation.

10.2 Materials to avoid.

Acids, alkalis.

10.3 Hazardous decomposition products

By thermal decomposition above 93 ° C polysulphide polymer vapors of volatiles containing hydrogen sulphide may be generated, directly affecting central nervous system.

If heating in the presence of high humidity formaldehyde and formic acid in volatile product may be formed (prove deleterious effect on human organism).

11. TOXICOLOGICAL INFORMATION

Liquid polysulfide polymer - unhazardous substance LD50=10000.

Weak skin irritant effect. Sensitizing, narcotic, carcinogenic, mutagenic effects are not investigated. Reproductive toxicity is not investigated.

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Liquid polysulfide polymer pollution is possible under disregard of handling, storage, transportation rules and as the result of emergency situation as well.

By incineration hazardous products may be generated: hydrogen sulfide (class of hazard 2), sulfur dioxide (class of hazard 3).

12.2 Mobility

No information

12.3 Persistence and degradability

No information

12.4 Ability of bioaccumulation

No information

12.5 Results of persistence, bioaccumulation and toxicity assessment

No information

13. DISPOSAL CONSIDERATION

Wastes formed during the manufacture of liquid polysulfide polymer go through scraping and it used for manufacture of building purpose polymers.

Wastes formed in emergency situations must be put into isolated package and sent to industrial wastes dump.

- Exclude non-organized location, waste burial and incineration of garbage,
- Exclude release of wastes into organism.

14. TRANSPORT INFORMATION

Railway tanks and truck tanks are marked "organic polysulfide".

Liquid polysulfide polymer is transported in covered transport vehicles of any type of transport in accordance with shipping rules of actual type of transport.

Cargo is identified as no dangerous.

Shipping data (transport marking)

- name of manufacturer or trademark
- name and grade of polysulfide polymer
- lot No
- package No
- net and gross weight
- production date.

Each label is marked with manipulating sign:

"Protect from fire"

"Protect from sunlight"

"Temperature limitation".

15. REGULATORY INFORMATION

Sanitation-and-epidemiological expertise was made; sanitation-and-epidemiological conclusion was given.

Laws:

1. Consumer protection
2. Environment protection
3. Citizens sanitation-and-epidemiologically well-being law
4. Technical regulation law

Regulatory information

1. Technological regulation of production of liquid polysulfide polymers.
2. Technical conditions 38.50309-93 as amended "Liquid polysulfide polymers"
3. Sanitation-and-epidemiological conclusion for "liquid polysulfide polymers" No 16.11.03.229.P.001181.11.04 dated 04.11.2004
4. Rescue emergency care for acute poisoning. Reference book on toxicology under the editorship S.N. Golikov, "Medicine", 1977.
5. Hazardous products in industry. Book of reference in 3 parts under the editor ship N.V. Lazarev and G.D.Gadaskina, "Chemistry", 1977.
6. I.V.Garmonov, Synthetic rubber – "Chemistry", 1983.
7. P.A.Kirpichnikov, L.A.Averko-Antonovich, Y.O.Averko-Antonovich, Chemistry and technology of synthetic rubber, "Chemistry", 1975.
8. Safety regulations and accidental release measures with hazardous cargos during transportation by railway.

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