

## MATERIAL SAFETY DATA SHEET

### PRODUCT NAME: Polyvinyl Chloride (PVC), flexible

#### 1. IDENTIFICATION OF PRODUCT AND COMPANY

- Identification of product: Polyvinyl Chloride (PVC), plasticized.
- Chemical family: Polymer.
- Product description: A tactic amorphous flexible polymer, transparent, colored and translucent or colored and opaque.

#### 2. COMPOSITION / INFORMATION ABOUT COMPONENTS

Accepted chemical name: Polyvinyl chloride (PVC), plasticized.

Compound consisting of:

- Polyvinyl chloride resin  $[\text{CH}_2 - \text{CHCl}]_n$
- Plasticizer(s): Phthalate esters (diisodecyl ; diisononyl ; diisooctyl)  
Adipate esters (di-2-thylexyladipate).
- Stabilizer(s): Butyl tin mercaptopeptide. 2,5-thiophenedylbis(5-ten-butyl-1,3-benzoxazol)

Other additives (according to product): coloring agents, anti-static agent, fire retardant. Etc.

#### 3. HAZARD IDENTIFICATION

Main dangers:

- In case of thermal decomposition:
  - Releasing of fumes.
  - Releasing of hydrochloric acid gas (hydrogen chloride: HCl) – carbon monoxide (CO) – carbon dioxide (CO<sub>2</sub>).
- Static electricity: the product can accumulate electrical charges (except antistatic products).
- This substance is not classified as dangerous.

#### 4. FIRST AID

- Inhalation of thermal decomposition products:

Use suitable respiratory protection, move the affected person away quickly and use artificial respiration. If not breathing, seek medical advice.

- Contact with the skin:

Contact with the hot product: treat in the same way as a thermal burn without chemical action, wash immediately and copiously with cold water. Do not attempt to remove material adhering to the skin.

**5. FIREFIGHTING MEASURES**

- Firefighting procedure:

Spray with water to cool fire exposed surfaces and protect people from heat.

- Appropriate extinguishing media:

Water, atomized water, powder, foam, carbon dioxide (CO<sub>2</sub>); all means of extinguishing are acceptable.

- Specific danger:

Releasing of dense smoke and acid fumes.

Always consider the risk of corrosion by hydrochloric acid (HCl) in base of fire. In this case, ventilate properly the rooms and wash the walls and every metal part immediately after the fire. Electrical fittings may need to be replaced.

- Special protective equipment for firefighters:

Wear personal breathing apparatus to allow for hydrochloric has that may be released. Protect exposed skin areas.

**6. ACCIDENTAL RELEASE MEASURES**

- Individual precautions:

Not applicable.

- Environmental precautions

Do not discharge into the environment (sewer, rivers, soils ...) but dispose into controlled areas. Flexible PVC is suitable for recycling, even several cycles.

**7. STORAGE AND HANDLING**

- Storage:

Store away from heat (maximum temperature between 40 and 50), sources of ignition (naked flame) and humidity

Provide normal ventilation of rooms.

Incompatible material: none.

Recommend packaging materials: all types of packaging.

- Handling

Technical measures.

Normal ventilation of rooms.

Setting up of personal breathing apparatus nearby (in case of fire).

Caution: the product can accumulate static electricity charges (except antistatic products).

**8. EXPOSURE CONTROL/PERSONAL PROTECTION**

- Test parameter:

Not applicable.

- Personal equipment protection:

Not applicable.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance:

Physical state: solid, semi-rigid.

Shape: strips or panels of variable widths, thickness and length.

Color: transparent, colored and translucent, colored and opaque.

Odor: characteristic, which disappears in time.

- pH:

Not applicable.

- Melting temperature:

140 - 170°C.

- Decomposition temperature

Decomposition depends on temperature and exposure time.

>120°C for extended period of exposure (ca. 3 hours).

>250°C for brief exposure.

- Flashpoint:

Not applicable.

- Self-ignition temperature:

Approximately 380°C.

- Explosiveness characteristic:

None.

- Vapor pressure:

Not available.

- Vapor density:

1.2 to 1.5 kg/dm<sup>3</sup> at 20°C.

- Solubility:

Hydro solubility: not suitable.

Lipo solubility (solvent, oily, more or less soluble in solvents such as ketones, esters, benzene, cyclohexane, trichloroethylene, tetrahydrofurane.

- Calorific power:

Approximately 17 Mega Joules / kg.

#### **10. STABILITY AND REACTIVITY**

- Stability:

Stable under normal storage conditions.

- Hazardous decomposition products:

Carbon monoxide (CO)

Carbon monoxide (CO)

Hydrochloric gas (HCl)

#### **11. TOXICOLOGICAL INFORMATION**

- Acute toxicity:

Practically not harmful.

Not carcinogenic not mutagenic, not teratogenic.

- Local effects:

Can be considered as non-irritant.

The thermal decomposition products are irritants and possibly corrosive to skin, eyes and respiratory mucous membrane.

#### **12. ECOLOGICAL INFORMATION**

PVC is a biologically inert polymer and its biodegradation is difficult.

#### **13. DISPOSAL CONSIDERATION**

- Product disposal:

Recycling is possible, even several times.

Incineration: releasing of hydrochloric gas requires fumes neutralization (do not burn in open air).

Only use controlled and approved sites for disposal of waste.

- Packaging treatment:

Reusing is possible (except for food purposes).  
Incineration.

#### **14. TRANSPORT INFORMATION**

- International regulation:

Not regulated.

#### **15. REGULATORY INFORMATION**

- EEC classification and labeling.

Labeling/symbol: not classified.

Current directives: this product does not require classification or labeling according to the European directives.

#### **16. OTHER INFORMATION**

- Applications:

The main application is for doorway in industrial and commercial buildings. Moreover, flexible polyvinyl chloride strips and panels are used for acoustic, anti-projection, and UV protection (welding protection screens), for packaging (non-food), and for the manufacturing of partitions, decorative objects, etc.

- Cleaning of dirty PVC:

Soapy water, water + detergent or water under pressure of less than 40°C. Possibility of disinfection with alcohol-based products up to 96% (burning alcohol) and at temperatures less than 40°C. Do not use solvents (ketones, esters, cyclohexanol, benzene, trichloroethylene, tetrahydrofurane). The information given in this data sheet comes from sources that we consider reliable and is based on the current state of our knowledge relative to the concerned product. The attention of users is also drawn to the risks that can be incurred when a product is used for other purposes than that for which it was designed.

The conditions or methods of handling, storage, use or disposal of the products are beyond our control and may not be within the scope of our knowledge.

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