I. GENERAL INFORMATION

Manufactured by: SURQUIMICA S.A.
Calle 38, contiguo al cementerio La Uruca
San José, Costa Rica, Centro América

Information phone: (506) 2211-3800
Fax: (506) 2257-2028

Emergency telephone:
CHEMTREC: 1-800-424-9300 (USA)
703-527-3887
SURQUIMICA S.A.: (506) 2211-3911

Product name: PEGAFORTE ADHESIVO POLIURETANO
(PEGAFORTE ADHESIVE POLYURETHANE)

Product code: 525-23700

II. HAZARDOUS COMPONENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>No CAS</th>
<th>% P/P</th>
<th>TLV / ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepolímero de poliisocianato aromático</td>
<td>67815-87-6</td>
<td>75-95</td>
<td>N.D.</td>
</tr>
<tr>
<td>Difenilmetildiisocianato</td>
<td>9016-87-9</td>
<td>30-50</td>
<td>N.D</td>
</tr>
</tbody>
</table>

III. HEALTH HAZARD

General overview: Harmful by inhalation, irritant.

Ingestion: Harmful if swallowed. May cause gastrointestinal disturbance with headache, dizziness and a feeling of intoxication.

Skin contact: Prolonged and repeated skin contact can cause dermatitis, drying and degreasing due to solvent properties. Cutaneous sensitizer. May produce an allergic reaction on the skin.

Inhalation: Respiratory sensitizer. It can irritate the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties in case of inhalation.

Eye contact: Risk of serious damage to eyes

Primary routes of entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact
IV. FIRST AID PROCEDURES

**Ingestion:** If ingested, do not induce vomiting. If conscious, drink 8-10 oz. of water promptly. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Inhalation:** Place the injured person in the open air, keep him warm and at rest, if the breathing is irregular or stops, practice artificial respiration. Do not administer anything oral way. If are unconscious, put him in an appropriate position and seek medical help.

**Skin contact:** In case of contact, wash skin immediately with soap and water. Remove contaminated clothing. NEVER use solvents or thinners.

**Eye contact:** If material gets into eyes, flush with water immediately for 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

V. FIRE AND EXPLOSION HAZARD DATA

**Flash point (°C):** Not flammable **Method:** N.D

**Flammability limits % (V):** LIE: N.D; LSE: N.D

**Extinguishing media:** Extinguishing powder or CO2. In case of more serious fires alcohol resistant foam and water spray. Do not use for the direct jetting of water.

**Fire and explosion hazards:** Depending on the magnitude of the fire, it may be necessary to wear suits protection against heat, self-contained breathing apparatus, gloves, protective goggles or face masks and boots.

**Firefighting procedures:** In the event of fire, wear self-contained breathing apparatus. Evacuate personnel to safe areas. Consider the wind direction. Water spray may be used to keep fire exposed containers cool. Do not allow water runoff to enter sewers or waterways. Do not allow water runoff to enter sewers or waterways.

**Hazardous combustion products:** The fire can produce a thick black smoke. As a result of thermal decomposition, hazardous products may be formed: carbon monoxide, carbon dioxide. Exposure to products of combustion or decomposition can be harmful to health.

VI. SPILL OR LEAK PROCEDURES

**Steps if spilled:** Ventilate area of leak or spill. Dike to prevent entering any sewer or waterway. Use non-sparking tools and equipment. Transfer liquid to a holding container. Keep people away from and upwind of spill/leak. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust.

**Waste disposal:** Do not dispose of waste into sewer. Do not empty into drains. Do not flush into surface water or sanitary sewer system. If recycling is not practicable, dispose of in compliance with the Environmental Protection Local Regulations.

VII. HANDLING AND STORAGE

**Handling instructions:** Keep out of reach of children. Hazardous residue may remain in emptied container. Do not reuse empty containers without commercial cleaning or reconditioning. Take precautionary
measures against static discharges. Use non-sparking type tools and equipment, including explosion proof ventilation. Keep away from open flames, hot surfaces and sources of ignition. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death. Handle in accordance with good industrial hygiene and safety practice.

**Storage:** Keep containers closed when not in use. Keep in a well-ventilated place. Keep in a dry, cool place. Separate from incompatibles. **Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid).** Do not attempt to clean empty containers since residue is difficult to remove.

**VIII. PROTECTION INFORMATION**

**Ventilation:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

**Respiratory protection:** Filter mask for protection against gases and particles.

**Skin protection:** Wear neoprene or nitrile gloves.

**Eye protection:** Use chemical safety goggles

**Other protective equipment:** Safety shower and eyewash station should be located in immediate work area.

**IX. PHYSICAL AND CHEMICAL DATA**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Color</strong></td>
<td>N.D</td>
</tr>
<tr>
<td><strong>Form/Appearance</strong></td>
<td>Viscous Liquid</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Characteristic</td>
</tr>
<tr>
<td><strong>% Volatile (p/p)</strong></td>
<td>N.D</td>
</tr>
<tr>
<td><strong>Vapor density (air = 1.0)</strong></td>
<td>N.D</td>
</tr>
<tr>
<td><strong>Solubility in water</strong></td>
<td>Insoluble, produces reaction</td>
</tr>
<tr>
<td>Density, lower value according to color, (g/mL)</td>
<td>1.2</td>
</tr>
<tr>
<td>Density, higher value according to color, (g/mL)</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>N.A.</td>
</tr>
<tr>
<td><strong>Flash point (°C)</strong></td>
<td>255</td>
</tr>
<tr>
<td><strong>V.O.C. (g/L)</strong></td>
<td>N.D</td>
</tr>
</tbody>
</table>

**X. STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions.

**Hazardous polymerization:** No

**Incompatibility:** Avoid oxidizing agents, acids and bases

**Decomposition products:** It does not decompose if it is intended for the intended uses.

**XI. TOXICOLOGICAL INFORMATION**

a) **Acute toxicity:** Inconclusive data for classification.

b) **Skin corrosion or irritation:** Classified product: Skin irritant, Category 2: Causes skin irritation.

c) **Serious eye or eye irritation:** Classified product: Eye irritation, Category 2: Causes serious eye irritation.
d) Respiratory or skin sensitization; Classified product: Respiratory sensitizer, Category 1: May cause allergy or asthma symptoms or breathing difficulties in case of inhalation. Skin sensitizer, Category 1: May cause an allergic skin reaction.

e) Mutagenicity in germ cells; Inconclusive data for classification.

f) Carcinogenicity; Classified product: Carcinogen, Category 2: Suspected to cause cancer

g) Toxicity for reproduction; Inconclusive data for classification.

h) Specific organ toxicity (STOT) - single exposure; Classified product: Toxicity in certain organs after single exposure, Category 3

i) Specific organ toxicity (STOT) - repeated exposure; Classified product: Toxicity to certain organs after repeated exposure, Category 2: May cause damage to organs through prolonged or repeated exposure.

j) Aspiration hazard; Inconclusive data for classification.

k) XII. ECOLOGICAL INFORMATION

Studies eco-toxicologic do not exist. Having no information about how to act in ecology, it is recommended to avoid the entry to any waterbody, like rivers, lakes, lagoons, sewers and underground natural waters. Ecological injuries are not known or expected under normal use

XIII. DISPOSAL PRODUCT

Disposal: Do not dispose of waste into sewer. Do not empty into drains. Do not flush into surface water or sanitary sewer system. If recycling is not practicable, dispose of in compliance with the Environmental Protection Local Regulations. Do not attempt to clean empty containers since residue is difficult to remove.

XIV. TRANSPORTATION INFORMATION

Shipping name: Not regulated

UN number: Not regulated

Class: Not regulated

Packing group: Not regulated

XV. REGULATORY INFORMATION

National regulation:

No Information.

Other regulations:

No Information.

XVI. OTHER INFORMATION

This MSDS include the following products, (Identified by code: 23700100

Hazardous Material Information System: HMIS
Health: 2 - Moderate  
Fire: 1 - Minimum  
Reactivity: 0 - None  
Personal Protection: B

National Fire Proteccion Association: NFPA

Health: 2 - Moderate  
Fire: 1 - Minimum  
Reactivity: 0 - None  
Special: __Snfpa__

The degrees of HMIS and NFPA imply the interpretation of the data that can vary from company to company, their objective is to allow a quick and general identification of the magnitude of the danger specific. In order to manage this material in sure form it should be kept in mind the entirety of the information contained in this MSDS.

Note: The destinatary should send this MSDS to any transporter or eventual user of our product. The information offered in this sheet is based on data supplied by our providers and is determinate in our plant. Although we think that we are reliable, this product is sold to be used with a defined propose. SURQUIMICA S.A. does not assume any responsibility for the damage that this product can cause to any buyer or third person.