

## ADHESIVE BINDER P2

## TECHNICAL DATA SHEET

Nature of the Product: P2 is an adhesive binder made of synthetic-based resin.

Scope of use : Preparation of surfaces to be decorated with TattooWall technique

Characteristics:

Aspect: white liquid

Viscosity: 500-900 mPas (Brookfield RVF sp. 6 RPM 20, 20°C)

Dry: elevated

pH: slightly acid

Resistance to cold: very good

Total drying time: 20-30 min. (to 20°C; u.r. 40%)

Ideal working temperature: Min. 15° C - Max. 35°C.

Finish look: Semi gloss

Conditions of use: Verify that the surface is clean and dry, with a stable and not friable or crumbly substrate.

Confection: 30 Kg Buckets

Storage: The product rejects ice. It remains unaltered in its original packaging for six months if tightly closed and at temperatures of at least 20° C.

## SAFETY SHEET

1. Product Identification and Company Information

Denomination: Adhesive binder P2

Chemical name: Adhesive composed of copolymer carboxy-functional acrylic acid-based esters with the use of vinyl acetate, in aqueous dispersion.

2. Composition/Information on the ingredients

According to the current norms in force it does not contain substances considered to be hazardous.

3. Danger warning

There is no indication of specific danger if used under normal conditions

4. First aid procedures

There are not known episodes of health hazards attributable to the product. However, it is recommended to observe the rules of good industrial hygiene.

*Contact with the skin:* wash immediately with abundant water and soap. Replace the contaminated clothes/garment/suit.

*Contact with the eyes:* immediately wash with water with open eyelids for at least 15 minutes. Follow up with a visit to an eye doctor.

*Ingestion:* immediately rinse the mouth and drink plenty of water. Seek medical attention.

*Inhalation:* Rest, fresh air, medical assistance.

5. Firefighting measures

Refrigerate the containers in order to avoid the decomposition of the product and the development of potentially hazardous substances to the health and safety. Always wear the complete anti-fire protection gear.

Proper extinguishers: water spray, dry extinguisher, foam, carbon dioxide (CO<sub>2</sub>).

6. Procedures in case of accidental spillage

Soak up with soil or inert material. Pick up most of the material and eliminate the residues with water jets. Do not discharge into drains or the atmosphere; if the product is discharged into the drain system, or has contaminated the ground or the vegetation, inform the competent authorities.

Dispose of the collected material and eliminate the industrial waste waters in accordance with the respective norms in force.

## 7. Handling and storage

Avoid contact with the eyes and skin.

Assure proper ventilation. In the vapor zone of closed systems trace of inflammable substances can accumulate, therefore keep far away from ignition sources.

Assure the availability of cooling equipments for the containers, in order to avoid the dangers from overpressure and overheating in case of fire in the surroundings.

The product rejects ice.

## 8. Exposure Control/ Personal Protective Equipment

Components with thresholds to exposure to be enforced at the work place:

Methyl meth-acrylate,	CAS # 80-62-6
Vinyl acetate,	CAS # 108-05-4
Acetaldehyde,	CAS # 75-07-0
Styrene,	CAS # 100-42-5
Ethylbenzene,	CAS # 100-41-4
Methanol,	CAS # 67-56-1

With appropriate use, these thresholds will not be reached.

Follow good industrial hygiene standards of implementing adequate means of individual protection like gloves and work overalls. Do not eat or smoke on the job; wash hands before eating and at the end of the work shift. It is advised to carry out a sanitary control with the frequency and modality as per doctor advice.

## 9. Physical and chemical properties

Color	White
Odor	Characteristic
Physical state	Liquid
Viscosity (20°C)	500-900 mPas
Solubility	Soluble in water

## 10. Stability and reactivity

The product is stable under normal usage and storage conditions. Due to thermal decomposition, or in case of fire, potentially harmful vapors to health can be released.

## 11. Toxicological information

Due to an extended action of the product there could be possible irritations of the skin and the mucus membranes. There are not known episodes of harm to health due to exposure to the product. However, it is recommended to operate observing good industrial hygiene standards.

## 12. Environmental information

Removal considerations: the product can be completely eliminated from the water by means of an abiotic process, that is, by absorption on active mud. The product must not reach water bodies without a preventive treatment (a biological purification system).

Behavior in the dispersion of the atmosphere: with the correct breaking into small concentrations in adapted biological purification systems, there are no expected disadvantages for the activity of degradation of active mud.

Additional environmental considerations: observe local regulations regarding water cleanup.

## 13. Considerations on disposal

The disposal must be subject to a special treatment, that is, an adequate thermal-induction system.

## 14. Transportation Information

Goods that are not dangerous can be transported according to transportation regulations.

## 15. Regulation Information

According to CE (Council of Europe) regulations not subject to labeling for commerce. The customary precaution measures for handling of chemical products must be observed

## 16. Other information

The present card has been written in accordance of the enforced community norms

General bibliography:

- Regulation 88/379/CEE
- Regulation 91/325/CEE
- The merck Index.Ed10
- Handling Chemical Safety
- Niosh-Registry of Toxic Effects of Chemical Substances.
- INRS-Fiche Toxicologique
- Patty-Industrial Hygiene and Toxicology
- N.I Sax - Dangerous properties of industrial materials - 7 Ed., 1989
- CE Directive 96/65 of 11/10/96 (Forth Adjustment Dir. 88/379)
- CE Directive 98/98 of 15/12/98 (XXV Adjustment Dir. 67/548)
- IMO (Intern. Marittime Organization), Report n.35, 1989.

Notes for the user:

The information contained in this sheet are based on the knowledge available to us at the date of the last version.

The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

## TRANSPARENT VARNISH P3 - Catalyst by hydro-epoxy

### SAFETY DATA SHEET

#### 1. Product Identification and Company Information

Denomination: Catalyst by hydro-epoxy

Use: Catalysis components for hydro-epoxy finish.

#### 2. Composition/information on the ingredients

##### 2.1 Dangerous components present in the compound:

-Substance: Oxirane, mono (C12-14-alkyl-methyl) derivatives

Concentration: 25%

Danger symbol: Xi

Phrases R: 38-43

Number CAS: 068609-97-2

Number CE: 271-846-8

-Substance: reaction product: bisphenol - A-epichlorohydrin

Concentration: 50%

Symbol of danger: Xi N

Phrases R: 36/38-43-51/53

CAS number: 025068-38-6

CE number: 500-033-5

Substance: reaction product: bisphenol - F-epichlorohydrin; epoxy resin (medium molecular weight <sup>=700)

Concentration: 25%

Symbol of danger: Xi N

Phrases R: 36/38-43-51/53

Number CAS: 028064-14-4

Number CE:

##### 2.2 Danger classification of the ingredients:

- Oxirane, mono (C12-14-alkyl-methyl) derivatives:

irritant to the skin

sensitizing to the skin

-reaction product: Bisphenol - A-epichlorohydrin;

irritant to the skin

sensitizing to the skin

Hazardous to the environment, because of its acute aquatic toxicity and its long term negative effects.

- reaction product: bisphenol - F-epichlorohydrin; epoxy resin (medium molecular weight <sup>=700)  
irritant to the skin

sensitizing to the skin  
 hazardous to the environment, because of its acute aquatic toxicity and its long term negative effects.

For the meaning of the phrases R, refer to paragraph 16 “Other information”

### 3. Danger warning

#### 3.1 Classification of the compound:

The compound is classified as sensitizing to the skin (R 43) and a skin irritant (R36/38)

#### 3.2 Dangers of chemical-physical type

#### 3.3 Negative effects in human health:

Contact with eyes can provoke irritation, reddening, tearing, and bruising.

As a result of the skin contact with the product, some of the following symptoms or effects can be manifested: irritations and local inflammation accompanied of itching or bruising, rash, dermatitis.

#### 3.3 Negative effects for the environment

### 4. First aid procedures

As a result of contact with the skin and eyes

As a result of ingestion

As a result of inhalation

In the event of contact with the eyes, the injured person can manifest the following symptoms: irritation, reddening, tearing, bruising, intolerance or aversion to the sun.

In such circumstance:

- Remove any contact lenses
  - Wash away the product from the eyes, as quickly as possible, with plenty of water while keeping the eyelids open. Continue washing for at least 15 minutes.
- If the irritation, tearing, pain and swelling of the eyes persist, it is necessary to seek prompt medical assistance.

- In the event of contact with the skin, the injured person can perceive an irritation or pain at epidermis level. In such circumstance:

- Remove immediately the contaminated clothes, including the shoes,
- If there are no adverse reactions with the use of water (strong exothermic reactions, formation of flammable substances, etc), wash away the product [continues to next page]

with abundant amount of water and soap. Continue washing for at least 15 minutes;

- If there are no adverse reactions with the use of water, remove the product mechanically by soaking it up with inert material, powder, etc): remove residues with abundant amounts of soap and water.

In the event in which the irritation or pain persists, it is necessary seek prompt medical assistance.

### 5. Firefighting procedures

#### 5.1 suitable extinguishing means

Proper extinguishers: water, foam, powder, and carbon dioxide.

5.2 Extinguishing means that for safety reasons, it cannot be used

5.3 special dangers of exposure deriving from the substance or the compound, by the products of the combustion or the produced gases

During a fire nitrogen oxides can be formed.

5.4 special fire protective gear for firefighters

Open-cycle SCBA (Self-Contained Breathing Apparatus) for firefighters protective gear; helmet, jacket, boot-to-trouser and gloves.

## 6. Procedures in case of accidental spillage

### 6.1 Precautionary measures for persons

To avoid contact with the skin, eyes and prevent inhalation of the product, wear the individual protective gear.

Persons not assigned to the firefighting operations must be removed from the premises. Eliminate or exclude all sources that can be the cause for a fire.

Block the spill of the product, if it does not represent danger to the person doing it.

Do not touch or trample on the product that has been dispersed on the ground.

### 6.2 Environmental precautions:

Prevent the contamination of ground waters, streams, the land and the dispersion in the air with adequate containment means or material:

a) For liquids, absorb them with soil, dry sand, vermiculite or other absorbent material that is not combustible;

b) For solids, remove with mechanical means and prevent dissemination of dust with confinement or cover structures;

c) For vapors, fight them with atomized water if there is no danger of polluting the ground or waters.

### 6.3 Clean-up Method

Remove with mechanical means or absorb or cover with soil, dry sand, and diatomaceous earth or with other non combustible material and transfer all in an appropriate container for subsequent disposal.

## 7. Handling and storage

### 7.1 Handling:

Use only in well ventilated places or in places provided with aspiration systems.

### 7.2 Storage:

The containers and their materials for packaging the product, where applicable, must be in accordance with ground transportation standards of dangerous goods.

### 7.3 Specific uses

## 8. Control of exposure/Personal Protective Equipment

## 8.1 Safe Limits Standards to Exposure

### 8.2.1 Respiratory protection:

As a general rule, the respiratory protection must be carried out with provisions of technical nature that avoid the contact between operator and product. The best system for handling the product is the closed-circuit one; when such type of job cannot be carried out, a fixed or mobile localized aspiration system must be used to move the collected material to an adequate filtering or abatement group.

### 8.2.2 Hands protection

PPE (Personal Protective Equipment) for the hands must be used considering its resistance to chemical agents, taking into account the result of tests performed in accordance with norm EN374.

Wear nitrile gloves.

### 8.2.3 Eye protection:

Use protection glasses or shield manufactured in acetate.

### 8.2.4 Skin protection:

For protection of the skin use: apron, protective boots or gear.

### 8.2.5 Control of environmental exposure

## 9. Physical and chemical properties

Aspect:

Viscous liquid, light yellow

Odor:

None

pH:

n/a

point/boiling interval:

it is decomposed before boiling

point/fusion interval:

-15° C

flashpoint:

177° C (ASTM D93)

flashpoint (solid, gas)

n/a

Self-igniting inflammability:

n/a

Explosive property:  
n/a

oxidizing property:  
n/a

vapor pressure:  
> 1 (air=1)

relative density:  
1,11 - 1,16

hydrosolubility  
< 1% in weight (25°C)

liposolubility (grease solvent to specify):  
n/a

octanol/water partition coefficient:  
n/a

viscosity:

vapor density:

evaporation speed:

other data:

## 10. Stability and reactivity

10.1 conditions to avoid

10.2 materials to avoid

10.3 dangerous decomposition products

## 11. Toxicological information

11.1 Exposure by inhalation

11.2 Exposure by ingestion

11.3 Exposure by contact with the skin and the eyes

## 12. Environmental information

12.1 Environmental information of general character:  
The degradation of the nitrocellulose leads to the formation of a wide variety of products in which many groups NO<sub>3</sub>-/NO<sub>2</sub>- are present.

Use according to good working practices avoiding dispersing the product in the environment.

## 12.2 Ecotoxicity

## 12.3 Mobility

## 12.4 Persistency and degradability

## 12.5 Potential bioaccumulation

## 12.6 Other adverse effects

### 13. Considerations on disposal

The residues of the product must be disposed in accordance with the national and regional norms in force. Containers must be thoroughly cleaned and sent to the recycling and recovery process before placing residues in a dump or before they are destroyed.

### 14. Transportation Information

#### 14.1 Specific precautions

During transportation the following general provisions must be observed.

- Heavier packages must be positioned lower and those that are light weight or fragile should go on top;
- Dangerous products must be kept separate from the other products;
- Dangerous products in the liquid state must be placed under those that are not dangerous;
- Inflammable or combustible products must be kept separated from products with oxidating or corrosive properties.

#### 14.2 Classification of transport in accordance with: ADR/IMDG/IMO, ICAO/IATA

##### regulation ADR/RID

UN number: 3082

Type of danger: 9

Correct denomination for shipping: HAZARDOUS TO THE ENVIRONMENT - LIQUID n.a.s. (Non specified otherwise)

group of packing: III

danger label: 9

other applicable information:

##### regulation IMDG/IMO

UN number: 3082

danger class: 9

Correct denomination for shipment: HAZARDOUS TO THE ENVIRONMENT - LIQUID n.a.s. (non specified otherwise)

Group of packing: III

Danger label: 9

Other applicable information:

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UN number: 3082

Danger class: 9

Correct denomination for shipment: HAZARDOUS TO THE ENVIRONMENT - LIQUID n.a.s. (non specified otherwise)

Group of packing: III

Danger label: 9

Other applicable information:

## 15. Information on the regulation

Information on the label:

- Irritant

- It contains:

Reaction product: bisphenol - A-epichlorohydrin

Reaction product: bisphenol - F-epichlorohydrin; epoxy resin (medium molecular weight <sup>=700

Oxirane, mono (C12-14-alkyl-methyl) derivatives

- In contact with the skin it can cause skin contact sensitization (R43)

- Irritant to the eyes and skin (R36/38)

- Avoid contact with the skin (S24)

- Wear adequate gloves (S37)

Other national or community dispositions regarding the use of the product:

- D.P.R. 303/56 "General norms for occupational hygiene"

- D.P.R. 547/55 "Norms for the prevention of the accidents on the job"

- D. Lvo 626/94 "Implementation of community directives, regarding the improvement of safety and health of workers on the job place"

- D. Lvo 334/99 "Control of the dangers of the most important incidents connected with certain dangerous substances"

- D. Lvo 152/99 "Dispositions on protecting of waters from pollution"

- D.Lvo 22/97 "Implementation of directives for disposal of refuse"

- D.Lvo 203/98 "Implementation of directives concerning norms in matter of air quality"

- D.M. 12.08.1998 "Restrictions related to entering the market and use of certain dangerous substances and compounds"

- D. Lvo 25/2002 "Implementation of the directive 98/24/CE on the protection of health and safety of workers on the job against the risks resulting from chemical agents during the job"

## 16. Other information

### 16.1 Other important information

General bibliography:

- National toxicology Program (NTP) - U.S. Department of Health and Human Services

- Niosh - Registry of Toxic Effects of Chemical Substances

- N.I. SAX - Dangerous properties of industrial materials - 7<sup>th</sup> Ed., 1989

Notes for the user:

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The user must ensure the appropriateness and thoroughness of the information related to the specific use of the product.