

Nature-Pavé *H₂O-Epoxy-Silane*

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

1. IDENTIFICATION OF SUBSTANCE AND SUPPLIER

1

Nature Pavé
5901, Falardeau
Sherbrooke, Qc, Canada, J1N 2K4

Tel. (819) 239-4028
Emergency: Canutec (613) 996-6666
Anti-Poison Center 1-800-463-5060

Product name: *H2O-Epoxy-Silane*

Two components kit; Hardener (Part A) / (Epoxy Part B), when mixed will react to form a stable non-hazardous film.

Hardener (Part A)

2. POTENTIAL HAZARDOUS INGREDIENTS

Component	CAS #	Concentration
Modified Polyamine	4246-51-59	≤ 30%

Contains non-hazardous inorganic pigments less than 20% and water more than 45%.

3. PHYSICAL and CHEMICAL PROPERTIES

Boiling point : 100 °C	Density : 1.13 Kg/L
Vapor Pressure : 15 mmHg	Form: Liquid
Water solubility : > 10 g/L	Odor : Ammoniacal
pH : not determined	

4. HAZARDS IDENTIFICATION

Emergency Overview

Severe eye irritant.
Severe respiratory irritant.
Severe skin irritant.

Valid from 2015/10/20

Nature-Pavé H_2O -Epoxy-Silane

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

Potential Health Effects

2

Inhalation : Harmful if inhaled and may cause delayed lung injury. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Eye contact : Severe eye irritation.

Chronic Health Hazard : This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. Prolonged contact may result in chemical burns and permanent damage.

Exposure Guidelines

Target Organs : Eyes. Respiratory system. Skin.

Symptoms : Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

Aggravated Medical Condition : Eye disease Asthma. Skin disorders and Allergies.

5. FIRST AID MEASURES

General advice : Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye contact : Rinse immediately with plenty of water also under the eyelids for at least 20 minutes. Remove contact lenses.

Skin contact : Wash off immediately with plenty of water for at least 20 minutes. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay.

Ingestion : Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Prevent aspiration of vomit. Turn victim's head to the side.

Valid from 2015/10/20

Nature-Pavé H_2O -Epoxy-Silane

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

Inhalation : If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

3

6. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical. Dry sand. Limestone powder.

Specific hazards : Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

Special protective equipment for fire-fighters : Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.

7. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear suitable protective clothing, gloves and eye/face protection.

Environmental precautions : Construct a dike to prevent spreading.

Methods for cleaning up : Place in appropriate chemical waste container.

8. HANDLING AND STORAGE

Handling : Adhere to work practice rules established by government regulations. Use only in well-ventilated areas. Avoid contact with eyes. Avoid breathing vapors and/or aerosols. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage : Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

9. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection : Wear appropriate respirator when ventilation is inadequate.

Valid from 2015/10/20

Nature-Pavé H_2O -Epoxy-Silane

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

Hand protection : Butyl-rubber Nitrile rubber. Neoprene gloves. Impervious gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

4

Eye protection : Goggles must be worn.

Skin and body protection : Long sleeve shirts and trousers without cuffs.

Hygiene : Discard contaminated leather articles. Provide readily accessible wash stations. Wash at the end of each workshift and before eating, smoking or using the toilet.

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.

Materials to avoid : Mineral acids. Sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Incompatible with bases. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.

Hazardous decomposition products : Nitric acid. Ammonia Nitrogen oxides (NO_x). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO₂). Nitrosamine.

11. TOXICOLOGICAL INFORMATION

Acute Health Hazard

Ingestion : No data is available on the product itself.

Inhalation : No data is available on the product itself.

Skin : No data is available on the product itself.

Eye irritation/corrosion : Severe eye irritation.

Acute dermal irritation/corrosion : Severe skin irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Aquatic toxicity : No data is available on the product itself.

Toxicity to other organisms : No data available.

Mobility : No data available.

Bioaccumulation : No data is available on the product itself.

Valid from 2015/10/20

Nature-Pavé *H₂O-Epoxy-Silane*

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products : Contact supplier if guidance is required.

Contaminated packaging : Dispose of container and unused contents in accordance with federal, state, and local requirements.

5

14. TRANSPORT INFORMATION

DOT : Not dangerous goods

IATA : Not dangerous goods

IMDG : Not dangerous goods

TDG : Not dangerous goods

Further Information Not classified as dangerous in the meaning of transport regulations. The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact an Nature Pavé customer service representative.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard (29 CFR 1910.1 200) Hazard Class(es) Irritant.

16. OTHER INFORMATION

HMIS Rating

Health : 2

Flammability : 1

Physical hazard : 0

Valid from 2015/10/20

Nature-Pavé H_2O -Epoxy-Silane

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

Epoxy (Part B)

2. POTENTIAL HAZARDOUS INGREDIENTS

6

Component	CAS #	Concentration
Reaction product of: Epinchlorohydrin (ECH) and Bisphenol A (BPA): (Mixture of DGEBA (C ₂₁ H ₂₄ O ₄) component and higher homologues)	25068-38-6	80-90%

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

3. PHYSICAL and CHEMICAL PROPERTIES

Boiling point : Not applicable	Density : 1.16 Kg/L
Vapor Pressure : Not applicable	Form: Liquid
Water solubility : Negligible	Odor : None
pH : Not applicable	

4. HAZARDS IDENTIFICATION

Emergency Overview

RISK STATEMENTS:

Irritating to eyes and skin.
May cause sensitization by skin contact.
Harmful to aquatic organisms.

SAFETY STATEMENTS:

Avoid contact with skin and eyes.
Wear suitable gloves, and eye/face protection.
After contact with skin, wash immediately with plenty of soap & water.

5. FIRST AID MEASURES

EYE CONTACT: For eyes, flush with plenty of water for 15 minutes & get medical attention.

Valid from 2015/10/20

Nature-Pavé H_2O -Epoxy-Silane

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

SKIN CONTACT: In case of contact with skin immediately remove contaminated clothing. Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

7

INHALATION: After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

SWALLOWING: Rinse mouth. Do NOT give liquids to an unconscious or convulsing person.

6. FIRE FIGHTING MEASURES

FIRE & EXPLOSION PREVENTIVE MEASURES : Isolate from amines, mercaptans, Lewis acids, heat and open flame.

EXTINGUISHING MEDIA : Carbon dioxide, dry chemical powder, sand, earth, or foam.

SPECIAL FIRE FIGHTING PROCEDURES : Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL EXPLOSION AND FIRE PROCEDURES: Applying to hot surfaces requires special precautions. The product is not in flammable range but will burn. Carbon monoxide is possible where incomplete combustion occurs.

7. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES : Keep unprotected personnel away. Wear appropriate personal protective equipment.

ENVIRONMENTAL PRECAUTIONS : Keep from entering storm sewers and ditches which lead to waterways.

CONTAINMENT AND CLEAN-UP MEASURES : Stop spill at source. Dike and contain. Collect leaking & spilled liquid in sealable containers as far as possible.

Valid from 2015/10/20

Nature-Pavé H_2O -Epoxy-Silane

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

8. HANDLING AND STORAGE

8

HANDLING : Use only with adequate ventilation. Avoid prolonged or repeated contact with skin. Wear goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse. Maximum temperature recommended for pumping or handling liquid product: 90 C / 194 F.

STORAGE : Do not store above 49 C/120 F. Should be stored in conditions so that moisture is excluded, preferably in the original containers kept tightly closed & upright when not in use to prevent leakage. Under these conditions and at normal temperatures, the storage life should be at least one year.

CONTAINER CLEANING : Wash with solvent. Incinerate concentrated solvent washing

9. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY EXPOSURE CONTROLS : A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use. VENTILATION

LOCAL EXHAUST : Necessary MECHANICAL (GENERAL): Acceptable
SPECIAL: None OTHER: None Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

PERSONAL PROTECTION : Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

WORK & HYGIENIC PRACTICES : Provide readily accessible eye wash stations. Wash at end of each workshift & before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

10. STABILITY & REACTIVITY

STABILITY : Stable under normal conditions.

CONDITIONS TO AVOID : Isolate from open flames.

Valid from 2015/10/20

Nature-Pavé H_2O -Epoxy-Silane

Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

9

MATERIALS TO AVOID : Isolate from strong oxidizing agents, amines, mercaptans, and Lewis acids.

HAZARDOUS DECOMPOSITION PRODUCTS : Carbon Oxides from heating.

HAZARDOUS POLYMERIZATION : Caustic can induce a vigorous polymerization at temperatures around 200 C / 492 F.

11. TOXICOLOGICAL INFORMATION

ACUTE HAZARDS

EYE & SKIN CONTACT : Primary irritation to skin, defatting, dermatitis.
Primary irritation to eyes, redness, tearing, blurred vision. Liquid can cause eye irritation. Wash thoroughly after handling.

INHALATION : Vapor harmful.

SWALLOWING: Swallowing can cause abdominal irritation, nausea, vomiting & diarrhea.

SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED : None Known.

CHRONIC HAZARDS : This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

MAMMALIAN TOXICITY INFORMATION: LD50 (Oral/rat): > 2000 mg/kg LD50 (Skin/rabbit): > 2000 mg/kg.

12. ECOLOGICAL INFORMATION

AQUATIC ANIMAL INFORMATION : Moderately toxic to aquatic animals, non-toxic to algae, insignificant toxicity to microorganisms.

MOBILITY IN SOIL : Mobility of this material has not been determined.

DEGRADABILITY : This product is completely biodegradable.

ACCUMULATION : Bioaccumulation of this product has not been determined.

Valid from 2015/10/20

MATERIAL SAFETY DATASHEET

13. DISPOSAL CONSIDERATIONS

10

Processing, use or contamination may change the waste management options. Recycle / dispose of observing national, regional, state, provincial and local health, safety & pollution laws. If in doubt, contact appropriate agencies.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME : None

IATA / ICAO : None

IMO / IMDG : None

EMERGENCY RESPONSE GUIDEBOOK NUMBER : None

SECTION 15. REGULATORY

SARA SECTION 311/312 HAZARDS: None Known All components of this product are on the TSCA list. This material contains no known products restricted under SARA Title III, Section 313 in amounts greater or equal to 1%.

INTERNATIONAL REGULATIONS : The components of this product are listed on the chemical inventories of the following countries: Australia, Canada, China, Europe (EINECS), Japan, Korea, United Kingdom.

CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

D2B: Irritating to skin / eyes.

SECTION 16. OTHER INFORMATION

HAZARD RATINGS:

Health (NFPA): 1,

Health (HMIS): 1,

Flammability: 1,

Reactivity: 0

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Nature-Pavé

PRODUCTS FOR CONCRETE

MATERIAL SAFETY DATASHEET

NOTICE :

11

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

Prepared by : Nature Pavé

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