



Printing date 12/29/2015 Reviewed on 12/29/2015

1 Identification

- Product identifier

- Trade name: Epoxy-Lock®

- Synonyms: Epoxy Lock® - All Colors - Applied

- Part number: Epoxylock - app

- Details of the supplier of the safety data sheet

- Manufacturer/Supplier:

ND Industries, Inc 1000 North Crooks Road Clawson, MI 48017

USA

Telephone: +1-248-288-0000 Email: info@ndindustries.com Website: www.ndindustries.com

- Information department: Product safety department

- Emergency telephone number:

United States: 1-800-424-9300 International: +1-703-527-3887

2 Hazard(s) identification

- Classification of the substance or mixture



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- Label elements

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
 - Hazard pictograms





GHS07 GHS08

- Signal word Warning

- Hazard-determining components of labeling:

Aminophenol Epoxy Resin Curing agent

Phosphine oxide

- Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation. H317 May cause an allergic skin reaction.

H361 Suspected of damaging fertility or the unborn child.

- Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P280 Wear protective gloves.

P280 Wear eye protection / face protection.

P272 Contaminated work clothing must not be allowed out of the workplace.
P264 Wash face, hands and any exposed skin thoroughly after handling.

P201 Obtain special instructions before use.

Printing date 12/29/2015 Reviewed on 12/29/2015

Trade name: Epoxy-Lock®

(Contd. of page 1)

P202 Do not handle until all safety precautions have been read and understood.

P270 Do not eat, drink or smoke when using this product.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. P333+P313 P308+P313 IF exposed or concerned: Get medical advice/attention. P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.

P330 Rinse mouth.

Take off contaminated clothing and wash it before reuse. P362+P364

P363 Wash contaminated clothing before reuse. P302+P352 IF ON SKIN: Wash with plenty of water. P321 Specific treatment (see on this label). P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

- NFPA ratings (scale 0 - 4)



Health = 1 Fire = 1 Reactivity = 0

- HMIS-ratings (scale 0 - 4)



*1 Health = *1 1 Fire = 1

- Other hazards

- Results of PBT and vPvB assessment
 - PBT: Not applicable.
 - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

- Description: Mixture of the substances listed below with nonhazardous additions.

- Dange	rous components:	
	Epoxy Resin	
	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2B, H320	
90-72-2	Aminophenol	10-20%
	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
	Ethoxylated dimethacrylate	10-20%
	Skin Irrit. 2, H315; Skin Sens. 1B, H317; Eye Irrit. 2B, H320	
15625-89-5	Acrylic polymer	10-20%
	Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	
25068-38-6	Bisphenol-A epoxy resin	5-10%
	Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	
103-83-3	Curing agent	1-5%
	Flam. Liq. 3, H226; Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	
75980-60-8	Phosphine oxide	≤ 1.00%
	Repr. 2, H361	

4 First-aid measures

- Description of first aid measures

- After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
 - Most important symptoms and effects, both acute and delayed No further relevant information available.
 - Indication of any immediate medical attention and special treatment needed No further relevant information available.

Printing date 12/29/2015 Reviewed on 12/29/2015

Trade name: Epoxy-Lock®

(Contd. of page 2)

5 Fire-fighting measures

- Extinguishing media

- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire fighting measures that suit the environment.

- Special hazards arising from the substance or mixture No further relevant information available.

- Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

- Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

- Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- Handling:

- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: No special measures required.

- Conditions for safe storage, including any incompatibilities

- Storage:
 - Requirements to be met by storerooms and receptacles: No special requirements.
 - Information about storage in one common storage facility: Not required.
 - Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters

- Components with limit values that require monitoring at the workplace:

15625-89-5 Acrylic polymer

WEEL Long-term value: 1 mg/m³

Skin

- Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls

- Personal protective equipment:

- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- Breathing equipment:

Not required.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Contd. on page 4)

Printing date 12/29/2015 Reviewed on 12/29/2015

Trade name: Epoxy-Lock®

- Protection of hands:

(Contd. of page 3)



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:



Tightly sealed goggles

- Body protection: Protective work clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties - General Information					
- Appearance:					
- Form:	Solid material				
- Color:	According to product specification				
- Odor:	Odorless				
- Odor threshold:	Not determined.				
- pH-value at 20 °C (68 °F):	8				
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. 260 °C (500 °F)				
- Flash point:	140 °C (284 °F)				
 Flammability (solid, gaseous): 	Not determined.				
- Ignition temperature:					
- Decomposition temperature:	Not determined.				
- Auto igniting:	Product is not selfigniting.				
- Danger of explosion:	Product does not present an explosion hazard.				
- Explosion limits:					
- Lower:	Not determined.				
- Upper:	Not determined.				
- Vapor pressure:	Not applicable.				
- Density at 20 °C (68 °F):	1.01 g/cm³ (8.428 lbs/gal)				
- Relative density	Not determined.				
- Vapor density	Not applicable.				
- Evaporation rate	Not applicable.				
- Solubility in / Miscibility with					
- Water:	Insoluble.				
- Partition coefficient (n-octanol/water)	: Not determined.				
- Viscosity:					
- Dynamic:	Not applicable.				
- Kinematic:	Not applicable.				
- Solvent content:					
- Organic solvents:	13.0 %				

Printing date 12/29/2015 Reviewed on 12/29/2015

Trade name: Epoxy-Lock®

(Contd. of page 4)

- VOC content:	13.0 % 0.0 g/l / 0.00 lb/gl	
- Solids content: - Other information	51.0 % No further relevant information available.	

10 Stability and reactivity

- Reactivity No further relevant information available.
 - Chemical stability
 - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
 - Acute toxicity:

- LD/LC50 values that are relevant for classification: 90-72-2 Aminophenol						
103-83-3 Curing agent						
Oral	LD50	265 mg/kg (rat)				
Dermal	LD50	1660 mg/kg (rabbit)				
Inhalative	LC50/4 h	2.06 mg/l (rat)				
75980-60-8 Phosphine oxide						
Oral	LD50	>5000 mg/kg (rat)				

- Primary irritant effect:
 - on the skin: Irritant to skin and mucous membranes.
 - on the eye: Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

- Carcinogenic categories
 - IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

- NTP (National Toxicology Program)

None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- Toxicity
 - Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
 - Bioaccumulative potential No further relevant information available.
 - Mobility in soil No further relevant information available.
- Ecotoxical effects:
 - Remark: Harmful to fish
- Additional ecological information:
 - General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

- Results of PBT and vPvB assessment

- PBT: Not applicable.
- **vPvB:** Not applicable.

Printing date 12/29/2015 Reviewed on 12/29/2015

Trade name: Epoxy-Lock®

(Contd. of page 5)

- Other adverse effects No further relevant information available.

13 Disposal considerations

- Waste treatment methods
 - Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
 - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number

- DOT, IMDG, IATA

not regulated

- UN proper shipping name

- DOT, IMDG, IATA

not regulated

- Transport hazard class(es)

- DOT, IMDG, IATA

- Class

not regulated

- Packing group

- DOT, IMDG, IATA

not regulated

- Environmental hazards:

Not applicable.

- Special precautions for user

Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78

and the IBC Code

Not applicable.

- UN "Model Regulation":

not regulated

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
 - Sara
 - Section 355 (extremely hazardous substances):

None of the ingredients is listed.

- Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- TSCA (Toxic Substances Control Act):

Aminophenol

Acrylic polymer

Bisphenol-A epoxy resin

Curing agent

Phosphine oxide

- Proposition 65
 - Chemicals known to cause cancer:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

- Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

- Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- Carcinogenic categories
 - EPA (Environmental Protection Agency)

None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

- NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

Printing date 12/29/2015 Reviewed on 12/29/2015

Trade name: Epoxy-Lock®

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(Contd. of page 6)

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: ND Industries, Inc. Safety, Health and Environmental Affaires
- Contact: Safety, Health and Environmental Affaires
 - Date of preparation / last revision 12/29/2015 / -
 - Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Skin Sens. 1B: Sensitisation - Skin, Hazard Category 1B

Repr. 2: Reproductive toxicity, Hazard Category 2

The information set forth is based on information that ND Industries, Incorporated believes to be accurate. No warranty, expressed or implied, is intended. The information is provided solely for your information and consideration and ND Industries Inc. assumes no legal responsibility for use or reliance thereon. In the event of a discrepancy between the information on the non-English document and its English counterpart, the English version shall supersede.

®ND and ND Industries, Inc. are registered trademarks of ND Industries Incorporated, ®Vibra-TITE is a registered trademark of ND Industries, Inc.