1 Identification

- **Product identifier**
  - **Trade name:** ND Patch®
  - **Synonyms:** High Temperature Nylon Patch
  - **Part number:** HTNYLON
  - **Application of the substance / the mixture** Thread Locking

- **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**
  
  ![GHS07]
  Sensitization - Skin 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]

- **Signal word** Warning

- **Hazard-determining components of labeling:**
  - Epoxy resin
  - Curing agent

- **Hazard statements**
  - H317 May cause an allergic skin reaction.

- **Precautionary statements**
  - P261 Avoid breathing dust/fume/gas/mist/vapors/spray
  - P272 Contaminated work clothing must not be allowed out of the workplace.
  - P280 Wear protective gloves.
  - P302+P352 If on skin: Wash with plenty of water.
  - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
  - P321 Specific treatment (see on this label).
  - P363 Wash contaminated clothing before reuse.
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **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.
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.
  - **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.

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.
  - **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:**
  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.
    No special precautions are necessary if used correctly.
  - **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:**
      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:
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
    - 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.
    - Protection of hands:

      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
  - Eye protection: Required use of safety glasses
  - Body protection: Protective work clothing

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Powder
      - Color: Orange
    - Odor: Light
    - Odor threshold: Not determined.
  - pH-value: Not applicable.
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: Undetermined.
  - Flash point: ≥ 94 °C (≥ 201.2 °F)
  - Flammability (solid, gaseous): Not determined.
    - 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:
    - Relative density: Not determined.
    - Vapor density: Not applicable.
    - Evaporation rate: Not applicable.
Safety Data Sheet
acc. to OSHA HCS

Printing date 04/26/2023
Reviewed on 12/20/2022

Trade name: ND Patch®

- Solubility in / Miscibility with
  - Water: Insoluble.

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.

- Solvent content:
  - VOC content: 0.00 %
  - Solids content: 99.8 %

- Other information
  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:
  Aldehyde
  Hydrocarbons

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      ATE (Acute Toxicity Estimate)
      Oral LD50 45,106 mg/kg

      CAS: 25036-25-3 Epoxy resin
      Oral LD50 2,500 mg/kg (rat)
      Dermal LD50 2,500 mg/kg (rabbit)

      Curing agent
      Oral LD50 2,000 mg/kg (rat)
      Dermal LD50 2,000 mg/kg (rabbit)

      CAS: 93-69-6 1-o-tolylbiguanide
      Oral LD50 100 mg/kg (ATE)

- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: No 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.
Trade name: ND Patch®

- **Behavior in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.

- **Additional ecological information:**
  - **General notes:**
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

- **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, ADN, IMDG, IATA** not regulated

- **UN proper shipping name**
  - **DOT, ADN, IMDG, IATA** not regulated

- **Transport hazard class(es)**
  - **DOT, ADN, IMDG, IATA**
    - **Class** not regulated

- **Packing group**
  - **DOT, IMDG, IATA** not regulated

- **Environmental hazards**
  - **Marine pollutant:** No

- **Special precautions for use**
  - **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
    - **UN "Model Regulation":** Not applicable.

### 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):**
      All components have the value ACTIVE.
    - **Hazardous Air Pollutants**
      None of the ingredients is listed.
    - **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.
Trade name: ND Patch®

- 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)
None of the ingredients is listed.

  - NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.

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

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 Affairs
- Contact: Safety, Health and Environmental Affairs

**Classification System:**

- HMIS-ratings (scale 0 - 4)

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  Health = 0
  Fire = 1
  Reactivity = 0

- NFPA ratings (scale 0 - 4)

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  Health = 0
  Fire = 1
  Reactivity = 0

- Date of preparation / last revision 04/26/2023

- Abbreviations and acronyms:
  ADR: Accord relatif au transport international 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
  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)
  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
  Acute Toxicity - Oral 3: Acute toxicity – Category 3
  Acute Toxicity - Oral 4: Acute toxicity – Category 4
  Skin Irritation 2: Skin corrosion/irritation – Category 2
  Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
  Sensitization - Skin 1: Skin sensitisation – Category 1
  Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

- * Data compared to the previous version altered.

- Disclaimer

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