SAFETY DATA SHEET

POLYMER CARBIDE BASE

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: POLYMER CARBIDE BASE
PRODUCT CODE: #PCBASE
PRODUCT USE: Resin Component - 2 Part Epoxy Coating
MANUFACTURER
DUDICK, INC.
1818 MILLER PARKWAY
STREETSBORO, OH, 44241
330-562-1970

2. HAZARDS IDENTIFICATION

CLASSIFICATION:
Skin Irritant - Category 2
Skin Sensitizer - Category 1
Serious Eye Damage/Eye Irritation - Category 2

GHS LABEL ELEMENTS:

SIGNAL WORD: Warning

HAZARD STATEMENTS:
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

PRECAUTIONARY STATEMENTS:
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local, regional, and federal regulations.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer</td>
<td>25% to 40%</td>
<td>25068-38-6</td>
</tr>
<tr>
<td>diglycidylether of polypropylene glycol</td>
<td>0% to 5%</td>
<td>9072-62-2</td>
</tr>
</tbody>
</table>

No further information available for this product.

4. FIRST AID MEASURES

**EYES:** Hold open eyelids and flush with copious amounts of water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical advice/attention.

**SKIN:** Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

**INGESTION:** Do not induce vomiting. Rinse mouth out and give plenty of water. Never give anything by mouth to an unconscious person. Consult physician.

**INHALATION:** Consult a physician after significant exposure. Move person to fresh air. If unconscious place in recovery position and seek medical advice.

**NOTES TO PHYSICIAN:** No data available for this product.

5. FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Alcohol resistant foam; Carbon Dioxide (CO2); dry chemical; dry sand; use water to keep containers cool.

**UNSUITABLE EXTINGUISHING MEDIA:** No data available for this product.

**SPECIFIC HAZARDS IN CASE OF FIRE:** Burning may produce noxious and toxic fumes. Incomplete combustion may form carbon monoxide. Product is not considered a fire hazard, but will burn if ignited. Closed containers may rupture (due to build up in pressure) when exposed to extreme heat.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTION FOR FIRE FIGHTERS:** Wear self-contained breathing apparatus (SCBA) in positive pressure mode and full protective clothing. Evacuate area.

6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

**ENVIRONMENTAL PRECAUTIONS:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**METHOD AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Contain spilled material if possible. Absorb with materials such as: Sand. Polypropylene fiber products. Polyethylene fiber products. Remove residual with soap and hot water. Collect in suitable and properly labeled containers. Residual can be removed with solvent. Solvents are not recommended for clean-up unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed. Consult appropriate solvent Safety Data Sheet for handling information and exposure guidelines.

7. HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** General Handling:
Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Application of a direct flame to a container containing liquid epoxy resin can cause explosion and/or fire.

**CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES:** Do not store near incompatibles (strong oxidizers, acids, alkalis). Do not store near excessive heat or near sources of ignition. Keep container tightly closed when not in use.

### 8. EXPOSURE CONTROLS \ PERSONAL PROTECTION

#### EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4’-Isopropylidenediphenol-Epichlorohydrin Copolymer</td>
<td>25068-38-6</td>
<td>None established.</td>
</tr>
<tr>
<td>Diglycidylether of polypropylene glycol</td>
<td>9072-62-2</td>
<td>None established</td>
</tr>
</tbody>
</table>

**ENGINEERING CONTROLS:** Ventilation:
Use local exhaust ventilation, or other engineering controls to maintain airborne levels requirements or guidelines, general ventilation should be sufficient for most operations.

**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use a NIOSH/MHSA approved respirator with organic vapor cartridge.

**EYES PROTECTION:** Use safety glasses (with side shields) as minimum protection. Goggles recommended for individuals mixing the resin and catalyst.

**SKIN PROTECTION:** Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand protection: Use chemical resistant gloves. Consult glove manufacturer for recommendations.

**WORK HYGIENIC PRACTICES:** Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating. Wash contaminated clothing before reuse.

**OTHER USE PRECAUTIONS:** No data available for this product.

**COMMENTS:** No data available for this product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Viscous liquid

**COLOR:** Varies

**FLASH POINT AND METHOD:** Not Determined.

**AUTO-IGNITION TEMPERATURE:** Not Determined.

**BOILING POINT/RANGE:** No data available for this product.

**MELTING POINT:** Not Determined.

**VAPOUR PRESSURE:** Not determined.

**VAPOUR DENSITY:** Heavier than air.

**SOLUBILITY:** Not determined.

**ODOR/THRESHOLD:** Mild, characteristic.

**LOWER / UPPER FLAMMABLE LIMITS:** No data available for this product.

**DENSITY:** 2.1981

**EVAPORATION RATE:** Slower than ether.

**PARTITION COEFFICIENT:** Not determined.

**pH:** Not Applicable.

**DECOMPOSITION TEMPERATURE:** Not determined.
10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: This product is stable under normal storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur under normal conditions.
CONDITIONS TO AVOID: Avoid heat, flame, contaminants. Do not mix with hardener and leave unattended as heat and fumes can result.
MATERIALS TO AVOID: Avoid contact with oxidizing materials. Avoid contact with: Acids, Bases. Avoid unintended contact with amines.
HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide, and water.

11. TOXICOLOGICAL INFORMATION

SIGNS AND SYMPTOMS OF OVEREXPOSURE:
ACUTE EFFECTS:
  EYE CONTACT: May cause eye irritation. Corneal injury is unlikely.
  SKIN CONTACT: Has caused allergic skin reactions in humans. Contains component(s) which have demonstrated the potential for contact allergy in mice.
  Prolonged contact may cause skin irritation with local redness. Repeated contact may cause skin irritation with local redness.
INHALATION: This product is of low volatility and not expected to be a major inhalation hazard.
INGESTION: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
TARGET ORGAN: No data available for this product.
CHRONIC EFFECTS: Repeated exposure may result in allergic skin reactions.
TOXICITY VALUES: Not determined

12. ECOLOGICAL INFORMATION

PERSISTENCE AND DEGRADABILITY:
Not determined.
BIO-ACCUMULATIVE POTENTIAL:
No data available for this product.
MOBILITY IN SOIL:
Not determined.
OTHER ADVERSE EFFECTS:
Not known.
ECOTOXICOLOGICAL OTHER INFORMATION:
No data available for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of according to local, state, and federal regulations through a licensed disposal facility.

14. TRANSPORT INFORMATION

UN NUMBER: Not regulated.
UN PROPER SHIPPING NAME: Not regulated.
TRANSPORT HAZARD CLASS:
Not applicable.
TRANSPORT HAZARD SUBCLASS:
Not applicable.
PACKING GROUP: N/A
MARINE POLLUTANT Y/N: No
SPECIAL PRE-CAUTIONS: None

15. REGULATORY INFORMATION

U.S. REGULATIONS:
All components of this product are listed on or exempt from the TSCA Inventory.

U.S. SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)
311/312 HAZARD CATEGORIES:
FIRE: No
PRESSURE GENERATING: No
REACTIVITY: No
ACUTE: Yes
CHRONIC: Yes

313 REPORTABLE INGREDIENTS:
313 REPORTABLE INGREDIENTS

302/304 EMERGENCY PLANNING
EMERGENCY PLAN: No reportable components

STATE REGULATIONS:
No components are on the California Proposition 65 list.

OTHER GOVT. REGULATIONS: No other information available

16. OTHER INFORMATION

MANUFACTURER DISCLAIMER: The information contained herein is accurate to the best of our knowledge. Dudick, Inc. makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances and with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. The information contained on this MSDS has been compiled from information obtained from raw material suppliers and is believed to be accurate. It is the responsibility of the user to ensure that he/she has all of the current data and MSDS relevant to the material thereon and to comply with all Federal, State and Local Regulations.