



## Safety Data Sheet

Prepared in Accordance with HCS 29  
C.F.R. 1910.1200

### 1. Identification of the Substance/Mixture and the Company/Undertaking

|  |  |                         |            |
|--|--|-------------------------|------------|
| <b>1.1 Product Identifier</b>  | 154DA1NL   | <b>Revision Date:</b>   | 09/10/2024 |
| <b>Product Name:</b>   | PROTECTO-FLEX BC<br>PART A   | <b>Supersedes Date:</b> | New SDS    |
| <b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b> | Component of multicomponent industrial coatings - Industrial use.<br>Advised against: others than recommended  |                         |            |
| <b>1.3 Details of the supplier of the safety data sheet</b>                              | <p><b>Manufacturer :</b> Dudick, a Division of Carboline<br/>2150 Schuetz road<br/>St. Louis, Mo. 63146</p> <p>Regulatory / Technical Information:<br/>330-562-1970</p> <p><b>Datasheet Produced by:</b> Schlereth, Ken - regulatory@carboline.com</p> |                         |            |
| <b>1.4 Emergency telephone number:</b>   | <p>CHEM-TEL (US Transportation): (800) 255-3924<br/>CHEM-TEL (International Transportation): +01-813-248-0585<br/>HEALTH: Pittsburgh Poison Control 1-412-681-6669</p>   |                         |            |

### 2. Hazard Identification

#### 2.1 Classification of the substance or mixture

Hazardous to the aquatic environment, Chronic, category 2  
Eye Irritation, category 2  
Skin Irritation, category 2  
Skin Sensitizer, category 1  
STOT, single exposure, category 3, RTI

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Warning

### Named Chemicals on Label

EPOXY PHENOL NOVOLAC RESIN, BISPHENOL A EPOXY RESIN, ALKYL GLYCIDYL ETHER

### HAZARD STATEMENTS

|   |      |  |
|---|------|--|
| Skin Irritation, category 2                               | H315 | Causes skin irritation.                          |
| Skin Sensitizer, category 1                               | H317 | May cause an allergic skin reaction.             |
| Eye Irritation, category 2                                | H319 | Causes serious eye irritation.                   |
| STOT, single exposure, category 3, RTI                    | H335 | May cause respiratory irritation.                |
| Hazardous to the aquatic environment, Chronic, category 2 | H411 | Toxic to aquatic life with long lasting effects. |

### PRECAUTION PHRASES

|              |   |
|--------------|---|
| P261         | Avoid breathing dust/fume/gas/mist/vapours/spray.   |
| P273         | Avoid release to the environment.   |
| P280         | Wear protective gloves/protective clothing/eye protection/face protection.  |
| P302+352     | IF ON SKIN: Wash with plenty of soap and water.   |
| P304+340     | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.                                    |
| P305+351+338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P333+313     | If skin irritation or rash occurs: Get medical advice/attention.  |
| P391         | Collect spillage.   |
| P501         | Dispose of contents/container to waste treatment/disposal facility in accordance with local, state, and federal regulations.        |

## 2.3 Other hazards

No Information

### Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

## 3. Composition/Information On Ingredients

### 3.2 Mixtures

#### Hazardous ingredients

| Name According to EEC   | EINEC No. | CAS-No.    | %        | Classifications  |  |
|-------------------------|-----------|------------|----------|------------------|--|
| BISPHENOL A EPOXY RESIN | 500-033-5 | 25068-38-6 | 50 - <75 | H315-317-319-411 | Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1 |
| ALKYL GLYCIDYL ETHER    | 271-846-8 | 68609-97-2 | 10 - <25 | H315-317-335     | Skin Irrit. 2, Skin Sens. 1, STOT SE 3 RTI                   |

EPOXY PHENOL  
NOVOLAC RESIN

701-263-0

9003-36-5

2.5 - &lt;10

H315-317-411

Aquatic Chronic 2, Skin Irrit. 2,  
Skin Sens. 1**CAS-No.****M-Factors**25068-38-6  
68609-97-2  
9003-36-5**Remarks:** CAS No. 25068-38-6 identified as CAS No. 1675-54-3, EC No. 216-823-5 under REACH Registration**Additional Information:** The text for GHS Hazard Statements shown above (if any) is given in Section 16.**4. First-aid Measures****4.1 Description of First Aid Measures**

**AFTER INHALATION:** Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

**AFTER SKIN CONTACT:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.

**AFTER EYE CONTACT:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**AFTER INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

**4.2 Most important symptoms and effects, both acute and delayed**

May cause sensitization by skin contact. Irritating to eyes and skin. May be harmful if swallowed. Toxic to aquatic organisms.

**4.3 Indication of any immediate medical attention and special treatment needed**

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

**5. Fire-fighting Measures****5.1 Extinguishing Media:**

Carbon Dioxide, Dry Chemical, Foam

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None known.

**FOR SAFETY REASONS NOT TO BE USED:** Do not use a solid water stream as it may scatter and spread fire.

**5.2 Special hazards arising from the substance or mixture**

No Information

**5.3 Advice for firefighters**

**SPECIAL FIREFIGHTING PROCEDURES:** In the event of fire, wear self-contained breathing apparatus. Evacuate personnel to safe areas. Use NIOSH approved respiratory protection. Use water spray to cool unopened containers.

**SPECIAL FIREFIGHTING PROTECTION EQUIPMENT:** No Information

**6. Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. For personal protection see section 8.

**6.2 Environmental precautions**

Do not allow material to contaminate ground water system. Prevent product from entering drains.

**6.3 Methods and material for containment and cleaning up**

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations

(see section 13).

**6.4 Reference to other sections**

No Information

**7. Handling and Storage****7.1 Precautions for safe handling**

**INSTRUCTIONS FOR SAFE HANDLING :** Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Ensure all equipment is electrically grounded before beginning transfer operations. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Avoid breathing vapors, mist or gas. Wash thoroughly after handling.

**PROTECTION AND HYGIENE MEASURES :** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

**7.2 Conditions for safe storage, including any incompatibilities**

**CONDITIONS TO AVOID:** Heat, flames and sparks.

**STORAGE CONDITIONS:** Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

**7.3 Specific end use(s)**

The mixing and application to be in accordance with the technical data sheets.

**8. Exposure Controls/Personal Protection****8.1 Control parameters****Ingredients with Occupational Exposure Limits (US)**

| <u>Name</u>                | <u>CAS-No.</u> | <u>ACGIH TWA</u> | <u>ACGIH STEL</u> | <u>ACGIH Ceiling</u> |
|----------------------------|----------------|------------------|-------------------|----------------------|
| BISPHENOL A EPOXY RESIN    | 25068-38-6     | N/E              | N/E               | N/E                  |
| ALKYL GLYCIDYL ETHER       | 68609-97-2     | N/E              | N/E               | N/E                  |
| EPOXY PHENOL NOVOLAC RESIN | 9003-36-5      | N/E              | N/E               | N/E                  |

| <u>Name</u>                | <u>CAS-No.</u> | <u>OSHA PEL</u> | <u>OSHA STEL</u> |
|----------------------------|----------------|-----------------|------------------|
| BISPHENOL A EPOXY RESIN    | 25068-38-6     | N/E             | N/E              |
| ALKYL GLYCIDYL ETHER       | 68609-97-2     | N/E             | N/E              |
| EPOXY PHENOL NOVOLAC RESIN | 9003-36-5      | N/E             | N/E              |

**FURTHER ADVICE:** Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

**8.2 Exposure controls****Personal Protection**

**RESPIRATORY PROTECTION:** In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

**EYE PROTECTION:** Safety glasses with side-shields.

**HAND PROTECTION:** Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier.

**OTHER PROTECTIVE EQUIPMENT:** Ensure that eyewash stations and safety showers are close to the workstation location.

**ENGINEERING CONTROLS:** Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined

areas.

## 9. Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

|   |                               |
|---|-------------------------------|
| <b>Appearance:</b>                                  | Grey, Viscous Liquid          |
| <b>Physical State</b>                               | Liquid                        |
| <b>Odor</b>   | Epoxy                         |
| <b>Odor threshold</b>                               | Not Determined                |
| <b>pH</b>   | Not Determined                |
| <b>Melting point / freezing point (°C)</b>          | Not Determined                |
| <b>Boiling point/range (°C)</b>                     | 242 F (117 C) - 500 F (260 C) |
| <b>Flash Point (°C)</b>                             | 304F (151°C)                  |
| <b>Evaporation rate</b>                             | Slower Than Ether             |
| <b>Flammability (solid, gas)</b>                    | Not Determined                |
| <b>Upper/lower flammability or explosive limits</b> | 3.8 - 21.0                    |
| <b>Vapour Pressure, mmHg</b>                        | Not Determined                |
| <b>Vapour density</b>                               | Heavier than Air              |
| <b>Relative density</b>                             | Not Determined                |
| <b>Solubility in / Miscibility with water</b>       | Not Determined                |
| <b>Partition coefficient: n-octanol/water</b>       | Not Determined                |
| <b>Auto-ignition temperature (°C)</b>               | Not Determined                |
| <b>Decomposition temperature (°C)</b>               | Not Determined                |
| <b>Viscosity</b>                                    | Not Determined                |
| <b>Explosive properties</b>                         | Not Determined                |
| <b>Oxidising properties</b>                         | Not Determined                |

### 9.2 Other information

|  |      |
|--|------|
| <b>VOC Content g/l:</b>                    | 98   |
| <b>Specific Gravity (g/cm<sup>3</sup>)</b> | 1.09 |

## 10. Stability and Reactivity

### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong oxidizing agents.

**10.6 Hazardous decomposition products**Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.**11. Toxicological Information****11.1 Information on toxicological effects****Acute Toxicity:****Oral LD50:** No information on the product itself as the product is not tested**Inhalation LC50:** No information on the product itself as the product is not tested**Irritation:** Eye Irritation, category 2A; Skin Irritation, category 2**Corrosivity:** Unknown**Sensitization:** Skin Sensitizer, category 1**Repeated dose toxicity:** Unknown**Carcinogenicity:** Unknown**Mutagenicity:** Unknown**Toxicity for reproduction:** Unknown**STOT-single exposure:** STOT, single exposure, category 3, RTI**STOT-repeated exposure:** Unknown**Aspiration hazard:** Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.  
Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u>          | <u>Oral LD50</u>          | <u>Dermal LD50</u>             | <u>Vapor LC50</u> | <u>Gas LC50</u>   | <u>Dust/Mist LC50</u> |
|----------------|-------------------------------|---------------------------|--------------------------------|-------------------|-------------------|-----------------------|
| 25068-38-6     | BISPHENOL A EPOXY RESIN       | 11400 mg/kg,<br>rat, oral | 23000 mg/kg,<br>dermal, rabbit | No<br>Information | No<br>Information | No<br>Information     |
| 68609-97-2     | ALKYL GLYCIDYL ETHER          | 17100 mg/kg,<br>oral, rat | No<br>Information              | No<br>Information | No<br>Information | No<br>Information     |
| 9003-36-5      | EPOXY PHENOL NOVOLAC<br>RESIN | >5000 mg/kg,<br>oral, rat | No<br>Information              | No<br>Information | No<br>Information | No<br>Information     |

**Additional Information:**

No Information

**12. Ecological Information****12.1 Toxicity:****EC50 48hr (Daphnia):** No information available.**IC50 72hr (Algae):** No information available.**LC50 96hr (fish):** No information available.**12.2 Persistence and degradability:** No information available.

- 12.3 Bioaccumulative potential:** No information available.
- 12.4 Mobility in soil:** No information available.
- 12.5 Results of PBT and vPvB assessment:** The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.
- 12.6 Other adverse effects:** No information available.

| <u>CAS-No.</u> | <u>Chemical Name</u>       | <u>EC50 48hr</u>         | <u>IC50 72hr</u>       | <u>LC50 96hr</u>          |
|----------------|----------------------------|--------------------------|------------------------|---------------------------|
| 25068-38-6     | BISPHENOL A EPOXY RESIN    | 2.1 mg/l (daphnia)       | 11 mg/l (algae)        | 1.3 mg/l (fish)           |
| 68609-97-2     | ALKYL GLYCIDYL ETHER       | 7.2 mg/L (Daphna)        | 844 mg/l (Algae)       | 1.8 g/L (Fish)            |
| 9003-36-5      | EPOXY PHENOL NOVOLAC RESIN | 1.6 mg/l (Daphnia Magna) | 1.8 mg/l (Green Algae) | 0.55 mg/l (Rainbow Trout) |

### 13. Disposal Considerations

- 13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport Information

- 14.1 UN number** UN3082
- 14.2 UN proper shipping name** Environmentally Hazardous Substance, Liquid, N.O.S.  
**Technical name** (Epoxy Resin)
- 14.3 Transport hazard class(es)** 9  
**Subsidiary shipping hazard** No Information
- 14.4 Packing group** III
- 14.5 Environmental hazards** Marine Pollutant: Yes (Epoxy Resin)
- 14.6 Special precautions for user** No information available.  
**EmS-No.:** F-A, S-F
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code** No information available.

### 15. Regulatory Information

- 15.1 Safety, health and environmental regulations/legislation for the substance or mixture:**

#### U.S. Federal Regulations: As follows -

##### CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

##### Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No SARA 313 substances exist in this product above de minimis concentrations.

**Toxic Substances Control Act:**

All components of this product are either listed on the TSCA Inventory or are exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

**U.S. State Regulations: As follows -****New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| HYDROPHOBIC SILICA   | 67762-90-7     |

**Pennsylvania Right-To-Know**

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

**CALIFORNIA PROPOSITION 65**

WARNING: Cancer and Reproductive Harm -- [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**International Regulations: As follows -****\* Canadian DSL:**

No Information

**15.2 Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**16. Other Information****Text for GHS Hazard Statements shown in Section 3 describing each ingredient:**

|      |  |
|------|--|
| H315 | Causes skin irritation.                          |
| H317 | May cause an allergic skin reaction.             |
| H319 | Causes serious eye irritation.                   |
| H335 | May cause respiratory irritation.                |
| H411 | Toxic to aquatic life with long lasting effects. |

**Reasons for revision**

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.



