



Safety Data Sheet

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

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

1.1 Product Identifier	154DB1NL	Revision Date:	09/10/2024
Product Name:	PROTECTO-FLEX BC PART B	Supersedes Date:	New SDS
1.2 Relevant identified uses of the substance or mixture and uses advised against	Component of multicomponent industrial coatings - Industrial use. Advised against: others than recommended		
1.3 Details of the supplier of the safety data sheet	<p>Manufacturer : Dudick, a Division of Carboline 2150 Schuetz road St. Louis, Mo. 63146</p> <p>Regulatory / Technical Information: 330-562-1970</p> <p>Datasheet Produced by: Schlereth, Ken - regulatory@carboline.com</p>		
1.4 Emergency telephone number:	<p>CHEM-TEL (US Transportation): (800) 255-3924 CHEM-TEL (International Transportation): +01-813-248-0585 HEALTH: Pittsburgh Poison Control 1-412-681-6669</p>		

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Dermal, category 4
 Acute Toxicity, Inhalation, category 4
 Acute Toxicity, Oral, category 4
 Hazardous to the aquatic environment, Chronic, category 2
 Flammable Liquid, category 3
 Reproductive Toxicity, category 2
 Skin Corrosion, category 1
 Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

TRIS-2,4,6- (DIMETHYLAMINOMETHYL)PHENOL, ORTHO-XYLENE, 4-TERT-BUTYLPHENOL, ETHYL BENZENE, BENZYL ALCOHOL, PARA-XYLENE, META-XYLENE, 2-PIPERAZIN-1-YLETHYLAMINE, ISOPHORONEDIAMINE, POLYAMIDE

HAZARD STATEMENTS

Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Acute Toxicity, Dermal, category 4	H312	Harmful in contact with skin.
Skin Corrosion, category 1	H314-1	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Reproductive Toxicity, category 2	H361f	Suspected of damaging fertility.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P308+313	IF exposed or concerned: Get medical advice/attention
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P352	Wash with plenty of soap and water.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
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**

<u>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>	
POLYAMIDE	614-452-7	68410-23-1	25 - <50	H315-317-318-411	Aquatic Chronic 2, Eye Dam. 1, Skin Irrit. 2, Skin Sens. 1
BENZYL ALCOHOL	202-859-9	100-51-6	10 - <25	H302-319-332	Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Eye Irrit. 2
ISOPHORONEDIAMIN E	220-666-8	2855-13-2	10 - <25	H302-312-314-317-412	Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 3, Skin Corr. 1, Skin Sens. 1A
META-XYLENE	203-576-3	108-38-3	2.5 - <10	H226-312-315-332	Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Flam. Liq. 3, Skin Irrit. 2
2-PIPERAZIN-1- YLETHYLAMINE	205-411-0	140-31-8	2.5 - <10	H302-312-314-317-412	Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 3, Skin Corr. 1, Skin Sens. 1
TRIS-2,4,6- (DIMETHYLAMINOMET HYL)PHENOL	202-013-9	90-72-2	2.5 - <10	H302-315-319	Acute Tox. 4 Oral, Eye Irrit. 2, Skin Irrit. 2
4-TERT- BUTYLPHENOL	202-679-0	98-54-4	2.5 - <10	H315-318-361F-410	Aquatic Chronic 1, Eye Dam. 1, Repr. 2, Skin Irrit. 2
PARA-XYLENE	203-396-5	106-42-3	2.5 - <10	H226-312-315-332	Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Flam. Liq. 3, Skin Irrit. 2
ETHYL BENZENE	202-849-4	100-41-4	2.5 - <10	H225-304-332-373-412	Acute Tox. 4 Inhalation, Aquatic Chronic 3, Asp. Tox. 1, Flam. Liq. 2, STOT RE 2
ORTHO-XYLENE	202-422-2	95-47-6	2.5 - <10	H226-312-315-332	Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Flam. Liq. 3, Skin Irrit. 2

CAS-No.

68410-23-1
100-51-6
2855-13-2
108-38-3
140-31-8
90-72-2
98-54-4
106-42-3
100-41-4
95-47-6

M-Factors**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.

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

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

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: Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

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. Cool containers / tanks with water spray. Flammable.

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. Do not breathe vapours or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. 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>
POLYAMIDE	68410-23-1	N/E	N/E	N/E
BENZYL ALCOHOL	100-51-6	N/E	N/E	N/E
ISOPHORONEDIAMINE	2855-13-2	N/E	N/E	N/E
META-XYLENE	108-38-3	100 PPM	150 PPM	N/E
2-PIPERAZIN-1-YLETHYLAMINE	140-31-8	N/E	N/E	N/E
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	N/E	N/E	N/E
4-TERT-BUTYLPHENOL	98-54-4	N/E	N/E	N/E
PARA-XYLENE	106-42-3	100 PPM	150 PPM	N/E
ETHYL BENZENE	100-41-4	20 PPM	125 ppm	
ORTHO-XYLENE	95-47-6	100 PPM	150 PPM	N/E

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
POLYAMIDE	68410-23-1	N/E	N/E
BENZYL ALCOHOL	100-51-6	N/E	N/E
ISOPHORONEDIAMINE	2855-13-2	N/E	N/E
META-XYLENE	108-38-3	100.00 PPM	N/E
2-PIPERAZIN-1-YLETHYLAMINE	140-31-8	N/E	N/E
TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	90-72-2	N/E	N/E
4-TERT-BUTYLPHENOL	98-54-4	N/E	N/E
PARA-XYLENE	106-42-3	100.00 PPM	N/E
ETHYL BENZENE	100-41-4	435 MGM3, 100 PPM	545 MGM3, 125 PPM

ORTHO-XYLENE

95-47-6

100.00 PPM

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

Appearance:	Clear. Viscous Liquid
Physical State	Liquid
Odor	Amine
Odor threshold	Not Determined
pH	Not Determined
Melting point / freezing point (°C)	Not Determined
Boiling point/range (°C)	176 F (80 C) - 531 F (277 C)
Flash Point (°C)	102°F (39°C)
Evaporation rate	Slower Than Ether
Flammability (solid, gas)	Not Determined
Upper/lower flammability or explosive limits	1.0 - 13.0
Vapour Pressure, mmHg	Not Determined
Vapour density	Heavier than Air
Relative density	Not Determined
Solubility in / Miscibility with water	Not Determined
Partition coefficient: n-octanol/water	Not Determined
Auto-ignition temperature (°C)	Not Determined
Decomposition temperature (°C)	Not Determined
Viscosity	Not Determined
Explosive properties	Not Determined
Oxidising properties	Not Determined

9.2 Other information

VOC Content g/l:	98
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Specific Gravity (g/cm³)

0.96

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 (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: N/D

Inhalation LC50: N/D

Irritation: Unknown

Corrosivity: Skin Corrosion, category 1

Sensitization: Skin Sensitizer, category 1

Repeated dose toxicity: Unknown

Carcinogenicity: Carcinogenicity category 2

Mutagenicity: Unknown

Toxicity for reproduction: Reproductive Toxicity, category 2

STOT-single exposure: Unknown

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>
68410-23-1	POLYAMIDE	>5000 mg/kg, oral, rat		Not Available		

100-51-6	BENZYL ALCOHOL	1230 mg/kg rat, oral	2001 mg/kg, dermal, rabbit	4176 mg/l / 4h, Inh, Rat	No Information	No Information
2855-13-2	ISOPHORONEDIAMINE	500 mg/kg oral	No Information	No Information	No Information	No Information
108-38-3	META-XYLENE	No Information	No Information	No Information	No Information	No Information
140-31-8	2-PIPERAZIN-1- YLETHYLAMINE	No Information	No Information	No Information	No Information	No Information
90-72-2	TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	1999 mg/kg (rat)	No Information	No Information	No Information	No Information
98-54-4	4-TERT-BUTYLPHENOL	5600 mg/kg skin 1500 mg/ kg oral	No Information	No Information	No Information	No Information
106-42-3	PARA-XYLENE	No Information	No Information	No Information	No Information	No Information
100-41-4	ETHYL BENZENE	3500 mg/kg rat, oral	>5000 mg/l, dermal rabbit	17.2 mg/L Inh, Rat, 4Hr	No Information	No Information
95-47-6	ORTHO-XYLENE	No Information	No Information	No Information	No Information	No Information

Additional Information:

This product may contain Ethyl Benzene, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals.

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>
68410-23-1	POLYAMIDE	No information	No information	No information
100-51-6	BENZYL ALCOHOL	230 mg/l (Daphnia)	700 mg/l (Algae)	10 mg/l (Fish)
2855-13-2	ISOPHORONEDIAMINE	No information	No information	No information
108-38-3	META-XYLENE	No information	No information	No information
140-31-8	2-PIPERAZIN-1-YLETHYLAMINE	No information	No information	No information
90-72-2	TRIS-2,4,6- (DIMETHYLAMINOMETHYL) PHENOL	No information	84 mg/l (Algae)	175 mg/l (Fish)
98-54-4	4-TERT-BUTYLPHENOL	No information	No information	No information
106-42-3	PARA-XYLENE	No information	No information	No information

100-41-4	ETHYL BENZENE	1.8 mg/l (Daphnia Magna)	4.6 mg/l (Green Algae)	4.2 mg/l (Rainbow Trout)
95-47-6	ORTHO-XYLENE	No information	No information	No information

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	UN2924
14.2	UN proper shipping name	Flammable Liquid, Corrosive, N.O.S.
	Technical name	(Xylene, Isophoronediamine, Aminoethylpiperazine)
14.3	Transport hazard class(es)	3
	Subsidiary shipping hazard	8
14.4	Packing group	III
14.5	Environmental hazards	No information available.
14.6	Special precautions for user	No information available.
	EmS-No.:	F-E, S-C
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:

Flammable (gases, aerosols, liquids, or solids), Acute Toxicity (any route of exposure), Reproductive toxicity, Skin Corrosion or Irritation, Respiratory or Skin Sensitization

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:

META-XYLENE	108-38-3	8.38
PARA-XYLENE	106-42-3	3.64
ETHYL BENZENE	100-41-4	3.46
ORTHO-XYLENE	95-47-6	2.64

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>
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No NJ Right-To-Know components exist in this product.

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

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:**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361F	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful 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.