

Section 1. Identification

Product Name : Deckguard® Top Coat

MANUFACTURER OR SUPPLIER'S DETAILS

Company Name of Supplier : The D.S. Brown Company

Address : The D.S. Brown Company
300 East Cherry Street
North Baltimore, Ohio 45872
419-257-3561

Emergency Telephone Number: ChemTrec: 800-424-9300 or 703-527-3887

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE

Recommended Use : Component of a Polyurethane System.

Section 2. Hazard(s) Identification

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910.1200

Acute Toxicity (Oral) : Category 4

Skin Corrosion : Category 1B

Serious Eye Damage : Category 1


Skin Sensitization : Category 1

Specific Target Organ Toxicity -Repeated Exposure (Oral) : Category 2 (Kidney, Liver, Pancreas)

Acute Aquatic Toxicity : Category 1

Chronic Aquatic Toxicity : Category 1

GHS LABEL ELEMENTS

Hazard Pictograms : 

Signal Word : **Danger**

Hazard Statements : H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs (Kidney, Liver, Pancreas) through prolonged or repeated exposure if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**
P260 Do not breathe dust/fume/gas/mist/vapors/spray.

Section 2. Hazard(s) Identification *cont'd.*

P264 Wash skin thoroughly after handling.

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

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

P314 Get medical advice/attention if you feel unwell.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

Other Hazards : None known.

Section 3. Composition/Information on Ingredients

Substance/Mixture : Mixture

Hazardous Components : See list below

Chemical Name	CAS Number	Concentration (% w/w)
Polyoxypropylenediamine	9046-10-0	50-70
4,4'-methylenebis[N-sec-butylaniline]	5285-60-9	30-50
diethylmethylbenzenediamine	68479-98-1	10-20

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

Section 4. First Aid Measures

General Advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

Section 4. First Aid Measures *cont'd.*

If Inhaled	: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In Case of Skin Contact	: Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. If on skin, rinse well with water. If on clothes, remove clothes.
In Case of Eye Contact	: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If Swallowed	: Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.
Most Important Symptoms and Effects, Both Acute and Delayed	: None known.

Section 5. Fire-Fighting Measures

Suitable Extinguishing Media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	: High volume water jet
Specific Hazards During Firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous Combustion Products	: No hazardous combustion products are known.
Specific Extinguishing Methods	: No data is available on the product itself.
Further Information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special Protective Equipment For Firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

Section 6. Accidental Release Measures

- Personal Precautions, Protective Equipment and Emergency Procedures** : Use personal protective equipment.
- Environmental Precautions** : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and Materials for Containment and Cleaning Up** : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

- Advice on Protection Against Fire and Explosion** : Normal measures for preventive fire protection.
- Advice on Safe Handling** : Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for Safe Storage** : Keep container tightly closed in a dry and well-ventilated place.
Containers with are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations/working materials must comply with the technological safety standards.
- Materials to Avoid** : No materials to be especially mentioned.

Section 8. Exposure Controls/Personal Protection

Components with Workplace Control Parameters : Contains no substances with occupational exposure limit values.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection : No personal respiratory protective equipment normally required.

Hand Protection Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye Protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and Body Protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene Measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

Section 9. Physical and Chemical Properties

Appearance : Liquid

Color : Blue

Odor : Amine-like

Odor Threshold : No data is available on the product itself.

pH Value : No data is available on the product itself.

Freezing Point : No data is available on the product itself.

Melting Point : No data is available on the product itself.

Boiling Point : No data is available on the product itself.

Flash Point : >185 °C
Method: Seta closed cup

Evaporation Rate : No data is available on the product itself.

Flammability (Solid, Gaseous) : No data is available on the product itself.

Flammability (Liquids) : No data is available on the product itself.

Upper Explosion Limit : No data is available on the product itself.

Lower Explosion Limit : No data is available on the product itself.

Vapor Pressure : No data is available on the product itself.

Relative Vapor Density : No data is available on the product itself.

Relative Density : 1.029 (20 °C)

Density : No data is available on the product itself.

Section 9. Physical and Chemical Properties *cont'd.*

Solubility(ies)	
Water solubility	: No data is available on the product itself.
Solubility in other solvents	: No data is available on the product itself.
Partition Coefficient: n-octonal/water	: No data is available on the product itself.
Auto-ignition Temperature	: No data is available on the product itself.
Thermal Decomposition	: No data is available on the product itself.
Self-Accelerating Decomposition Temperature (SADT)	: No data is available on the product itself.
Viscosity	: No data is available on the product itself.
Explosive Properties	: No data is available on the product itself.
Oxidizing Properties	: No data is available on the product itself.
Particle Size	: No data is available on the product itself.

Section 10. Stability and Reactivity

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical Stability	: Stable under normal conditions.
Possibility of Hazardous Reactions	: No hazards to be specially mentioned.
Conditions to Avoid	: None known.
Incompatible Materials	: None known.

Section 11. Toxicological Information

**Information on Likely Routes
of Exposure** : No data is available on the product itself.

ACUTE TOXICITY

Acute Oral Toxicity - Product	: Acute toxicity estimate: 654.78 mg/kg Method: Calculation method
Acute Inhalation Toxicity	: No data available
Acute Dermal Toxicity - Product	: Acute toxicity estimate: 2,761 mg/kg Method: Calculation method
Acute Toxicity (Other Routes of Administration)	: No data available

Section 11. Toxicological Information *cont'd.***SKIN CORROSION/IRRITATION**

Components : **Polyoxypropylenediamine:**
Result: Corrosive after 3 minutes to 1 hour of exposure

4,4'-methylenebis[N-sec-butylaniline]:
Species: Rabbit
Result: Mild skin irritation

diethylmethylbenzenediamine:
Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

SERIOUS EYE DAMAGE/EYE IRRITATION

Components : **Polyoxypropylenediamine:**
Result: Risk of serious damage to eyes
Assessment: Risk of serious damage to eyes.
Remarks: Risk of serious damage to eyes.

4,4'-methylenebis[N-sec-butylaniline]:
Species: Rabbit
Result: Mild eye irritation

diethylmethylbenzenediamine:
Species: Rabbit
Result: Irritating to eyes.
Assessment: Irritant

Species: Rabbit
Result: Normally reversible injuries
Assessment: Irritant
Method: OECD Test Guidelines 405

RESPIRATORY OR SKIN SENSITIZATION

Components : **4,4'-methylenebis[N-sec-butylaniline]:**
Exposure routes: Skin
Result: May cause sensitization by skin contact.

diethylmethylbenzenediamine:
Exposure Routes: Skin
Species: Guinea pig
Result: Does not cause skin sensitization.
Assessment: No data available

GERM CELL MUTAGENICITY

Components:

diethylmethylbenzenediamine:
Genotoxicity in vitro: : Metabolic activation: negative
Method: OECD Test Guideline 476
Result: negative

Section 11. Toxicological Information *cont'd.*

diethylmethylbenzenediamine:

Genotoxicity in vitro: : Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

CARCINOGENICITY

Components : **diethylmethylbenzenediamine:**
Species: Rat (male and female)
Application Route: Oral
Exposure Time: 24 months(s)
Dose: 1.8–3.2 mg/kg
Frequency of Treatment: 7 daily
Method: OECD Test Guideline 451
Result: Negative

Carcinogenicity – Assessment: No data available

IARC : No component of this product present at levels greater than or equal to 0.1% is identified as probably, possible or confirmed human carcinogen by IARC.

ACGIH : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

REPRODUCTIVE TOXICITY

Effects on fertility : No data available

Effects on Foetal Development: No data available

Reproductive Toxicity – Assessment : No data available

STOT-Single Exposure : No data available

STOT-REPEATED EXPOSURE

Components : **diethylmethylbenzenediamine:**
Exposure routes: Ingestion
Target Organs: Pancreas, Liver, Kidney
Assessment: May cause damage to organs through prolonged or repeated exposure.

REPEATED DOSE TOXICITY

Components : **diethylmethylbenzenediamine:**
Species: Rat, male and female
NOAEL: 8-10 mg/kg
Application Route: Ingestion
Exposure time: 2,160 h
Method: Subchronic toxicity

Section 11. Toxicological Information *cont'd.*

Repeated Dose Toxicity – Assessment : No data available

Aspiration Toxicity : No data available

EXPERIENCE WITH HUMAN EXPOSURE

General Information : No data available

Inhalation : No data available

Skin Contact : No data available

Eye Contact : No data available

Toxicology, Metabolism, Distribution : No data available

Neurological Effects : No data available

Further Information : No data available

Section 12. Ecological Information

ECOTOXICITY

Components : **Polyoxypropylenediamine:**
Toxicity to fish:
 LC50: >100 mg/l
 Exposure time: 96 h

Diethylmethylbenzenediamine:
Toxicity to fish:
 LC50 (Leuciscus idus (Golden orfe)): 200 mg/l
 Exposure time: 48 h
 Test type: Static test
 Test substance: Fresh water
 Method: DIN 38412

Components : **Polyoxypropylenediamine:**
Toxicity to daphnia and other aquatic invertebrates:
 EC50: 15 mg/l
 Exposure time: 48 h

Diethylmethylbenzenediamine:
Toxicity to daphnia and other aquatic invertebrates:
 EC50 (Daphnia magna (Water flea)): 0.5 mg/l
 Exposure time: 48 h
 Test type: Static test
 Test substance: Fresh water
 Method: Directive 67/548/EEC, Annex V, C.2.

Components : **Polyoxypropylenediamine:**
Toxicity to algae:
 IC50: 135 mg/l
 Exposure time: 72 h

Section 12. Ecological Information *cont'd.*

	<p>Diethylmethylbenzenediamine: Toxicity to algae: ErC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): ca. 104 mg/l Exposure time: 72 h Test type: static test Test substance: Fresh water Method: OECD Test Guideline 201</p>
Components	<p>: Diethylmethylbenzenediamine: M-Factor (Acute aquatic toxicity): 1 Toxicity to fish (Chronic toxicity): No data available Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): No data available M-Factor (Chronic aquatic toxicity): No data available</p>
Components	<p>: Diethylmethylbenzenediamine: Toxicity to microorganisms: EC50 (Pseudomonas putida): >= 170 mg/l Exposure time: 24 h Test Type: static test Test substance: Fresh water Toxicity to soil dwelling organisms: No data available Plant toxicity: No data available Sediment toxicity: No data available Toxicity to terrestrial organisms: No data available</p>

ECOTOXICOLOGY ASSESSMENT

Components	<p>: 4,4'-methylenebis[N-sec-butylaniline]: Acute aquatic toxicity: Very toxic to aquatic life.</p>
Components	<p>: 4,4'-methylenebis[N-sec-butylaniline]: Chronic aquatic toxicity: Very toxic to aquatic life with long lasting effects. Toxicity Data on Soil: No data available Other organisms relevant to the environment: No data available</p>

PERSISTENCE AND DEGRADABILITY

Components	<p>: Diethylmethylbenzenediamine: Bio degradability: Result: Not readily biodegradable. Biodegradation: <60% Exposure time: 28 d Result: Not readily biodegradable. Biodegradation: <1% Exposure time: 28 d Method: OECD Test Guideline 301D Biochemical Oxygen Demand (BOD): No data available Chemical Oxygen Demand (COD): No data available BOD/COD: No data available ThOD: No data available BOD/ThOD: No data available Dissolved organic carbon (DOC): No data available Physico-chemical removability: No data available Stability in water: No data available</p>
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Section 12. Ecological Information *cont'd.*

Components : **Diethylmethylbenzenediamine:**
 Photodegradation:
 Test type: Air
 Rate constant: <.00001
 Impact on sewage treatment: No data available

BIOACCUMULATIVE POTENTIAL

Components : **4,4'-methylenebis[N-sec-butylaniline]:**
 Bioaccumulation: Bioconcentration factor (BCF): 4,700

Diethylmethylbenzenediamine:
 Bioaccumulation: Bioconcentration factor (BCF): 13.82
 Remarks: Bioaccumulation is unlikely.
 Bioconcentration factor (BCF): 2.75
 Remarks: Does not bioaccumulate.

Components : **4,4'-methylenebis[N-sec-butylaniline]:**
 Partition coefficient: n-octanol/water: log Pow 6.08
 Method: QSAR

Diethylmethylbenzenediamine:
 Partition coefficient: n-octanol/water: log Pow 1.17 (25 °C)
 Method: OECD Test Guideline 107

Mobility in soil : **Mobility:** No data available

Components : **4,4'-methylenebis[N-sec-butylaniline]:**
 Distribution among environmental compartments: Koc: 4.91
 Method: QSAR

Diethylmethylbenzenediamine:
 Distribution among environmental compartments: Koc: 132-170
 Koc 31.72 - 551

Stability in soil: No data available

OTHER ADVERSE EFFECTS

Environmental Fate and Pathways : No data available

Results of PBT and vPvB Assessment : No data available

Endocrine Disrupting Potential : No data available

Adsorbed Organic Bound Halogens (AOX) : No data available

HAZARDOUS TO THE OZONE LAYER

Ozone Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82
 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
 Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A + B).

Section 12. Ecological Information *cont'd.*

Additional Ecological Information - Product	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.
Global Warming Potential (GWP)	: No data available

Section 13. Disposal Considerations

DISPOSAL METHODS

Waste from Residues	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated Packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

Section 14. Transport Information

INTERNATIONAL REGULATIONS

IATA

UN/ID No.	: UN 2735
Proper Shipping Name	: Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine, 4,4'-bis(butylamino) diphenylmethane)
Class	: 8
Packing Group	: II
Labels	: Corrosive
Packaging Instruction (cargo aircraft)	: 855
Packaging Instruction (passenger aircraft)	: 851

IMDG

UN Number	: UN 2735
Proper Shipping Name	: Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine, 4,4'-bis(butylamino) diphenylmethane)
Class	: 8
Packing Group	: II
Labels	: 8

Section 14. Transport Information *cont'd.*

EmS Code : F-A, S-B

Marine Pollutant : yes

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73.78 AND THE IBC CODE

Not applicable for product as supplied.

NATIONAL REGULATIONS

DOT CLASSIFICATION

UN/ID/NA number : UN 2735

Proper Shipping Name : Amines, liquid, corrosive, n.o.s. (Polyoxypropylenediamine, 4,4'-bis(butylamino) diphenylmethane)

Class : 8

Packing Group : II

Labels : Corrosive

ERG Code : 153

Marine Pollutant : yes (4,4'-bis(butylamino)diphenylmethane, diethyltoluenediamine)

Section 15. Regulatory Information

EPCA-EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This product does not contain any hazardous air pollutants (HAP, as defined by the U.S. Clean Air Act Section 112 (40 CFR 61))

CALIFORNIA PROPOSITION 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 15. Regulatory Information

THE COMPONENTS OF THIS PRODUCT ARE REPORTED IN THE FOLLOWING INVENTORIES

CH INV	: The formulation contains substances listed on the Swiss Inventory, On the inventory, or in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: On the inventory, or in compliance with the inventory

INVENTORIES

AICS (Australia), DSL (Canada), IECSC (china), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

TSCA- 5(A) SIGNIFICANT NEW USE RULE LIST OF CHEMICALS

No substances are subject to a Significant New Use Rule.

US. TOXIC SUBSTANCES CONTROL ACT (TSCA) SECTION 12(B) EXPORT NOTIFICATION (40 CFR 707, SUBPT D)

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

diethylmethylbenzenediamine 68479-98-1

Section 16. Other Information

NFPA	: Health: 3 Flammability: 1 Instability: 0
HMIS® IV	: Health: 3 Flammability: 1 Physical Hazard: 0
Revision Date	: 05/08/2018

The information and recommendations in this publication are the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTEUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

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