

**Safety Data Sheet
Astro EZ Topcoat**

SDS Revision Date:

10/23/2019



1. Identification

1.1. Product identifier

Product Identity

Astro EZ Topcoat

Alternate Names

Product Code: 62860088001-A Astro EZ Topcoat Activator and 62860088001-R Astro EZ Topcoat Resin

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

Two pack performance coatings. Restricted to professional users.

Application Method

See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name

Brunswick Bowling Products, LLC.
525 W. Laketon Ave.
Muskegon, MI 49441 USA

Emergency

24 hour Emergency Telephone No. (CHEMTEL)

International: +01-813-248-0585
US: 1-800-255-3924

Customer Service: Brunswick Bowling Products, LLC 231-725-4966

Please see attached Safety Data Sheets for the kit components

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



1. Identification

1.1. Product identifier

Product Identity

Astro EZ Topcoat Activator

Alternate Names

Product Code: 62860088001-A

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

Two pack performance coatings. Restricted to professional users.

Application Method

See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name

Brunswick Bowling Products, LLC
525 W. Laketon Ave.
Muskegon, MI 49441 USA

Emergency

24 hour Emergency Telephone No. (CHEMTEL)

International: +01-813-248-0585
US: 1-800-255-3924

Customer Service: Brunswick Bowling Products, LLC 231-725-4966

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Flam. Liq. 3;H226

Flammable liquid and vapor.

Acute Tox. 4;H332

Harmful if inhaled.

Skin Irrit. 2;H315

Causes skin irritation.

Eye Irrit. 2;H319

Causes serious eye irritation.

Skin Sens. 1;H317

May cause an allergic skin reaction.

Resp. Sens. 1;H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

STOT SE 3;H335

May cause respiratory irritation.

STOT RE 2;H373

May cause damage to organs through prolonged or repeated exposure. Specific Target Organs: (Not Available)

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P235 Keep cool.

P240 Ground / bond container and receiving equipment.

P241 Use explosion-proof electrical / ventilating / light / equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

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

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P313 Get medical advice / attention.

P314 Get Medical advice / attention if you feel unwell.

P321 Specific treatment (see information on this label).

P331 Do NOT induce vomiting.

P333+313 If skin irritation or a rash occurs: Get medical advice / attention.

P337+313 If eye irritation persists: Get medical advice / attention.

P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.

P362 Take off contaminated clothing and wash before reuse.

P363 Wash contaminated clothing before reuse.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

Mixture : yes

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | |
|---|----------|---|--------|
| Diphenylmethanediisocyanate CAS Number: 0000101-68-8 | 25 - 50 | Acute tox. 4;H332 STOT RE 2;H373 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317 | [1][2] |
| Propylene glycol monomethyl ether acetate CAS Number: 0000108-65-6 | 10 - 25 | Flam. Liq. 3;H226 | [1] |
| Benzene, 1,1'-methylenebis[isocyanato-, homopolymer CAS Number: 0039310-05-9 | 10 - 25 | Resp. Sens. 1;H334 | [1] |

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| | | | |
|---|------------|---|--------|
| Diphenylmethane diisocyanate, mixed isomers CAS Number: 0026447-40-5 | 10 - 25 | Acute tox. 4;H332 STOT RE 2;H373 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317 | [1] |
| POLYETHER POLYOL CAS Number: Proprietary | 5 - 10 | Not Provided | [1] |
| Solvent naphtha (petroleum), light aromatic CAS Number: 0064742-95-6 | 1 - 5 | Asp. Tox. 1;H304 | [1] |
| Hydrotreated heavy naphtha (petroleum) CAS Number: 0064742-48-9 | 1 - 5 | Asp. Tox. 1;H304 | [1] |
| 1,2,4-trimethylbenzene CAS Number: 0000095-63-6 | 1 - 5 | Flam. Liq. 3;H226 Acute Tox. 4;H332 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Aquatic Chronic 2;H411 | [1][2] |
| 1-methyl-2-pyrrolidone CAS Number: 0000872-50-4 | 0.10 - 1.0 | Repr. 1B;H360D (> 5%) Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 | [1] |

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin

Wash immediately with soap and water, removing contaminated clothes and shoes. Wash contaminated clothing before reuse. In case of skin irritation or allergic reactions, see a physician.

Ingestion

Not an expected route of exposure.

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

Overview

Notes to Physician: Treat symptomatically. May cause sensitization by inhalation and skin contact.

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



Protection of First-Responders: Avoid contact with skin, eyes and clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; use artificial respiration with the aid of a pocket mask equipped with a one-way valve or other respiratory medical device.

See section 2 for further details.

Inhalation

Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms of breathing difficulties if inhaled.

Eyes

Causes serious eye irritation.

Skin

May cause an allergic skin reaction. Causes skin irritation.

5. Fire-fighting measures

5.1. Extinguishing media

Foam, CO₂, Dry Chemical

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Thermal decomposition can lead to the release of irritating gases and vapors.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Keep cool.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust / fume / gas / mist / vapors / spray.

Do not get in eyes, on skin, or on clothing.

5.3. Advice for fire-fighters

Use self-contained breathing apparatus. Use water for cooling container to prevent pressure buildup, auto-ignition, or explosion. Avoid spreading burning liquid with water.

ERG Guide No. 127

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Do not take internally.

Ensure adequate ventilation. Avoid prolonged breathing of vapors.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

7. Handling and storage

7.1. Precautions for safe handling

Use personal protective equipment. Avoid contact with skin, eyes and clothing.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Precautions should be taken to minimize exposure to atmospheric humidity or water as carbon dioxide may be formed which, in closed containers can result in pressurization. Care should be taken when re-opening partly used containers.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons applying this preparation.

Incompatible materials: No data available.

Store in a well-ventilated place. Keep cool.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



8. Exposure controls and personal protection

8.1. Control parameters

Exposure

| CAS No. | Ingredient | Source | Value |
|--------------|---|----------|--|
| 0000095-63-6 | 1,2,4-trimethylbenzene | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | TWA 25 ppm (125 mg/m3) |
| | | Supplier | No Established Limit |
| 0000101-68-8 | Diphenylmethanediisocyanate | OSHA | C 0.2 mg/m3 (0.02 ppm) |
| | | ACGIH | TWA: 0.005 ppm Ceiling: 0.01 ppm Skin, S |
| | | NIOSH | TWA 0.05 mg/m3 (0.005 ppm) C 0.2 mg/m3 (0.020 ppm) [10-minute] |
| | | Supplier | No Established Limit |
| 0000108-65-6 | Propylene glycol monomethyl ether acetate | OSHA | No Established Limit |
| | | ACGIH | TWA: 50 ppm STEL: 75 ppm |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0000872-50-4 | 1-methyl-2-pyrrolidone | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | TWA 10.0 ppm WEEL 1 ppm, 4 mgm3 California permissible exposure limits for chemical contaminants |
| 0026447-40-5 | Diphenylmethane diisocyanate, mixed isomers | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0039310-05-9 | Benzene, 1,1'-methylenebis[isocyanato-, homopolymer | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0064742-48-9 | Hydrotreated heavy naphtha (petroleum) | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0064742-95-6 | Solvent naphtha (petroleum), light aromatic | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| | | | |
|-------------|------------------|----------|----------------------|
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| Proprietary | POLYETHER POLYOL | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |

8.2. Exposure controls

Respiratory

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Eyes

Safety glasses with side shields

Skin

Chemical resistant gloves/gauntlets, boots and apron (where risk of splashing)

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Provide eye bath and safety shower. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

| | |
|---|---|
| Appearance | Light Yellow Liquid |
| Odor | Mild Solvent |
| Odor threshold | Not determined |
| pH | Not Measured |
| Melting point / freezing point | Not Measured |
| Initial boiling point and boiling range | 319°F - 597°F |
| Flash Point | 104°F |
| Evaporation rate (Ether = 1) | Not Measured |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: 0.3% Upper Explosive Limit: 12.6% |
| Vapor pressure (Pa) | Not Measured |

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| | |
|--|----------------------------|
| Vapor Density | Not Measured |
| Specific Gravity | 1.1 (H ₂ O = 1) |
| Solubility in Water | Not Measured |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Not Measured |
| Decomposition temperature | Not Measured |
| Viscosity (cSt) | Not Measured |
| VOC Content | 370 g/L |

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Polymerization can occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Thermal decomposition can lead to the release of irritating gases and vapors.

11. Toxicological information

Acute toxicity

Based on the properties of the isocyanate content of this product, respiratory exposure may cause acute irritation and/or sensitization of the respiratory system resulting in asthmatic symptoms, wheezing and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to airborne concentrations of isocyanates well below the occupational exposure limit. Repeated exposure may lead to permanent respiratory disability.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LC50, mg/L/4hr | Inhalation Dust/Mist LC50, mg/L/4hr | Inhalation Gas LC50, ppm |
|--|------------------------------|---------------------------------|---------------------------------|-------------------------------------|-----------------------------|
| Diphenylmethanediisocyanate - (101-68-8) | 7,616.00, Rat - Category: NA | 9,400.00, Rabbit - Category: NA | No data available | No data available | No data available |
| Propylene glycol monomethyl ether acetate - (108-65-6) | 8,532.00, Rat - Category: NA | 5,000.00, Rabbit - Category: 5 | No data available | No data available | No data available |
| Benzene, 1,1'-methylenebis[isocyanato-, homopolymer - (39310-05-9) | No data available | No data available | No data available | No data available | No data available |
| Diphenylmethane diisocyanate, mixed isomers - (26447-40-5) | 6,400.00, Rat - Category: NA | 6,200.00, Rabbit - Category: NA | No data available | No data available | No data available |
| POLYETHER POLYOL - (Proprietary) | No data available | No data available | No data available | No data available | No data available |
| Solvent naphtha (petroleum), light aromatic - (64742-95-6) | 6,800.00, Rat - Category: NA | 3,400.00, Rabbit - Category: 5 | No data available | No data available | No data available |
| Hydrotreated heavy naphtha (petroleum) - (64742-48-9) | 5,000.00, Rat - Category: 5 | 3,160.00, Rabbit - Category: 5 | No data available | No data available | No data available |
| 1,2,4-trimethylbenzene - (95-63-6) | 3,400.00, Rat - Category: 5 | 3,160.00, Rabbit - Category: 5 | 18.00, Rat - Category: 4 | No data available | No data available |
| 1-methyl-2-pyrrolidone - (872-50-4) | 3,914.00, Rat - Category: 5 | 8,000.00, Rabbit - Category: NA | No data available | No data available | 5,100.00, Rat - Category: 4 |

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--------------|---|--------|---|
| 0000095-63-6 | 1,2,4-trimethylbenzene | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0000101-68-8 | Diphenylmethanediisocyanate | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No; |
| 0000108-65-6 | Propylene glycol monomethyl ether acetate | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0000872-50-4 | 1-methyl-2-pyrrolidone | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0026447-40-5 | Diphenylmethane diisocyanate, mixed isomers | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| | | | |
|--------------|---|------|--|
| 0039310-05-9 | Benzene, 1,1'-methylenebis[isocyanato-, homopolymer | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0064742-48-9 | Hydrotreated heavy naphtha (petroleum) | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0064742-95-6 | Solvent naphtha (petroleum), light aromatic | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| Proprietary | POLYETHER POLYOL | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

| Classification | Category | Hazard Description |
|-------------------------------|----------|--|
| Acute toxicity (oral) | --- | Not Applicable |
| Acute toxicity (dermal) | --- | Not Applicable |
| Acute toxicity (inhalation) | 4 | Harmful if inhaled. |
| Skin corrosion/irritation | 2 | Causes skin irritation. |
| Serious eye damage/irritation | 2 | Causes serious eye irritation. |
| Respiratory sensitization | 1 | May cause allergy or asthma symptoms of breathing difficulties if inhaled. |
| Skin sensitization | 1 | May cause an allergic skin reaction. |
| Germ cell mutagenicity | --- | Not Applicable |
| Carcinogenicity | --- | Not Applicable |
| Reproductive toxicity | --- | Not Applicable |
| STOT-single exposure | 3 | May cause respiratory irritation. |
| STOT-repeated exposure | 2 | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | --- | Not Applicable |

12. Ecological information

12.1. Toxicity

Harmful to aquatic life.

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|--|-------------------------------|------------------------------|--|
| Diphenylmethanediisocyanate - (101-68-8) | > 3,000, Fish | 129.70, Daphnia magna | 1,640.00 (72 hr), Algae |
| Propylene glycol monomethyl ether acetate - (108-65-6) | 100.00, Salmo gairdneri | 500.00, Daphnia magna | Not Available |
| Benzene, 1,1'-methylenebis[isocyanato-, homopolymer - (39310-05-9) | Not Available | Not Available | Not Available |
| Diphenylmethane diisocyanate, mixed isomers - (26447-40-5) | Not Available | 1,000.00, Daphnia magna | 4,300.00 (72 hr), Chlorella vulgaris |
| POLYETHER POLYOL - (Proprietary) | Not Available | Not Available | Not Available |
| Solvent naphtha (petroleum), light aromatic - (64742-95-6) | 9.22, Oncorhynchus mykiss | 6.14, Daphnia magna | 19.00 (72 hr), Selenastrum capricornutum |
| Hydrotreated heavy naphtha (petroleum) - (64742-48-9) | 2,200.00, Pimephales promelas | 2.60, Chaetogammarus marinus | Not Available |
| 1,2,4-trimethylbenzene - (95-63-6) | 7.72, Pimephales promelas | 3.60, Daphnia magna | Not Available |
| 1-methyl-2-pyrrolidone - (872-50-4) | 500.00, Leuciscus idus | 1.23, Daphnia magna | 500.00 (72 hr), Scenedesmus subspicatus |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

DOT (Domestic Surface Transportation)

IMO / IMDG (Ocean Transportation)

ICAO/IATA

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| | | | |
|---|--------------------------------|--------------------------------|--|
| 14.1. UN number | UN1263 | UN1263 | UN1263 |
| 14.2. UN proper shipping name | UN1263, Paint, 3, III, LTD QTY | UN1263, Paint, 3, III, LTD QTY | UN1263, Paint, 3, III |
| 14.3. Transport hazard class(es) | DOT Hazard Class: 3 | IMDG: 3 | Air Class: 3 |
| 14.4. Packing group | III | III | Packing Instruction: 355 III |
| 14.5. Environmental hazards | | | |
| IMDG | Marine Pollutant: No; | | |
| 14.6. Special precautions for user | No further information | EMS CODE: F-E S-E | |

15. Regulatory information

| | |
|--|--|
| Regulatory Overview | The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. |
| Toxic Substance Control Act (TSCA) | All components of this material are either listed or exempt from listing on the TSCA Inventory. |
| WHMIS Classification | B3 D2A |
| US EPA Tier II Hazards | Fire: Yes Sudden Release of Pressure: No Reactive: No Immediate (Acute): Yes Delayed (Chronic): Yes |

EPCRA 311/312 Chemicals and RQs (lbs):

Diphenylmethanediisocyanate (5,000.00)

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

1,2,4-trimethylbenzene

Diphenylmethanediisocyanate

Proposition 65 - Carcinogens (>0.0%):

Cumene

Proposition 65 - Developmental Toxins (>0.0%):

1-methyl-2-pyrrolidone

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

1,2,4-trimethylbenzene

Diphenylmethanediisocyanate

Pennsylvania RTK Substances (>1%):

1,2,4-trimethylbenzene

Diphenylmethanediisocyanate

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H226 Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H360D May damage the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material in any process, unless specified in the text.

End of Document

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



1. Identification

1.1. Product identifier

Product Identity

Astrolane EZ Topcoat Resin

Alternate Names

Product Code: 62860088001-R

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

Two pack performance coatings. Restricted to professional users.

Application Method

See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name

Brunswick Bowling Products, LLC.
525 W. Laketon Ave.
Muskegon, MI 49441 USA

Emergency

24 hour Emergency Telephone No. (CHEMTEL)

International: +01-813-248-0585
US: 1-800-255-3924

Customer Service: Brunswick Bowling Products, LLC 231-725-4966

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Flam. Liq. 3;H226 Flammable liquid and vapor.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Warning

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



H226 Flammable liquid and vapor.

[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P235 Keep cool.

P240 Ground / bond container and receiving equipment.

P241 Use explosion-proof electrical / ventilating / light / equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|---|----------|--------------------|-------|
| Propylene glycol monomethyl ether acetate CAS Number: 0000108-65-6 | 25 - 50 | Flam. Liq. 3;H226 | [1] |

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| | |
|-------------------|---|
| Inhalation | Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth. |
| Eyes | Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention. |
| Skin | Wash immediately with soap and water, removing contaminated clothes and shoes. Wash contaminated clothing before reuse. In case of skin irritation or allergic reactions, see a physician. |
| Ingestion | If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. |

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

Overview

Notes to Physician: Treat Symptomatically

Protection of First-Responders: Avoid contact with skin, eyes and clothing. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; use artificial respiration with the aid of a pocket mask equipped with a one-way valve or other respiratory medical device.

See section 2 for further details.

5. Fire-fighting measures

5.1. Extinguishing media

Foam, CO₂, Dry Chemical

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Keep cool.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

5.3. Advice for fire-fighters

Cool containers with water spray from a safe distance. Prevent fire-fighting water from entering surface or ground water. Never use welding or cutting torch on or near container (even empty) because product may ignite explosively.

Vapors heavier than air may develop hazardous combustion gases or vapors in the event of fire. Fire fighters should use self-contained breathing apparatus with face piece.

ERG Guide No. 127

6. Accidental release measures

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



6.1. Personal precautions, protective equipment and emergency procedures

Eliminate sources of ignition. Provide adequate ventilation. Keep people away from and upwind of spill/leak. Take precautionary measures against static discharge.
Do not take internally. Avoid prolonged breathing of vapors.

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

7. Handling and storage

7.1. Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: No data available.

Keep container tightly closed in a dry and well-ventilated place. Keep at temperatures between 4°C and 38°C. Keep out of the reach of children. Keep in properly labeled containers.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

| CAS No. | Ingredient | Source | Value |
|--------------|------------|--------|----------------------|
| 0000108-65-6 | | OSHA | No Established Limit |

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| | | |
|---|----------|--------------------------|
| Propylene glycol monomethyl ether acetate | ACGIH | TWA: 50 ppm STEL: 75 ppm |
| | NIOSH | No Established Limit |
| | Supplier | No Established Limit |

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--------------|---|--------|--|
| 0000108-65-6 | Propylene glycol monomethyl ether acetate | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

8.2. Exposure controls

Respiratory

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Eyes

Protective safety glasses recommended

Skin

Wear appropriate protective clothing.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

| | |
|---|--|
| Appearance | Opaque Liquid |
| Odor | Not determined |
| Odor threshold | Not determined |
| pH | Not Measured |
| Melting point / freezing point | Not Measured |
| Initial boiling point and boiling range | 289°F |
| Flash Point | 113°F TCC |
| Evaporation rate (Ether = 1) | Not Measured |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: 1.5% Upper Explosive Limit: 7% |

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



| | |
|---|-----------------------------|
| Vapor pressure (Pa) | Not Measured |
| Vapor Density | > 1 |
| Specific Gravity | 0.98 (H ₂ O = 1) |
| Solubility in Water | Negligible |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Not Measured |
| Decomposition temperature | Not Measured |
| Viscosity (cSt) | Not Measured |
| VOC Content | 2.37 lb/gal |

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LC50, mg/L/4hr | Inhalation Dust/Mist LC50, mg/L/4hr | Inhalation Gas LC50, ppm |
|--|------------------------------|--------------------------------|---------------------------------|-------------------------------------|--------------------------|
| Propylene glycol monomethyl ether acetate - (108-65-6) | 8,532.00, Rat - Category: NA | 5,000.00, Rabbit - Category: 5 | No data available | No data available | No data available |

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

| Classification | Category | Hazard Description |
|-------------------------------|----------|--------------------|
| Acute toxicity (oral) | --- | Not Applicable |
| Acute toxicity (dermal) | --- | Not Applicable |
| Acute toxicity (inhalation) | --- | Not Applicable |
| Skin corrosion/irritation | --- | Not Applicable |
| Serious eye damage/irritation | --- | Not Applicable |
| Respiratory sensitization | --- | Not Applicable |
| Skin sensitization | --- | Not Applicable |
| Germ cell mutagenicity | --- | Not Applicable |
| Carcinogenicity | --- | Not Applicable |
| Reproductive toxicity | --- | Not Applicable |
| STOT-single exposure | --- | Not Applicable |
| STOT-repeated exposure | --- | Not Applicable |
| Aspiration hazard | --- | Not Applicable |

12. Ecological information

12.1. Toxicity

Harmful to aquatic life.

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|--|-------------------------|----------------------------|-------------------|
| Propylene glycol monomethyl ether acetate - (108-65-6) | 100.00, Salmo gairdneri | 500.00, Daphnia magna | Not Available |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

| | DOT (Domestic Surface Transportation) | IMO / IMDG (Ocean Transportation) | ICAO/IATA |
|------------------------------------|---------------------------------------|--------------------------------------|--|
| 14.1. UN number | UN1263 | UN1263 | UN1263 |
| 14.2. UN proper shipping name | UN1263, Paint, 3, III, LTD QTY | UN1263, Paint, 3, III, LTD QTY | UN1263, Paint, 3, III |
| 14.3. Transport hazard class(es) | DOT Hazard Class: 3 | IMDG: 3 Sub Class: Not Applicable | Air Class: 3 Packing Instruction: 355 |
| 14.4. Packing group | III | III | III |
| 14.5. Environmental hazards | | | |
| IMDG | Marine Pollutant: No; | | |
| 14.6. Special precautions for user | No further information | EMS CODE: F-E S-E | |

15. Regulatory information

| | | |
|-------------------------------------|---|--------------------------------|
| Regulatory Overview | The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. | |
| Toxic Substance Control Act (TSCA) | All components of this material are either listed or exempt from listing on the TSCA Inventory. | |
| WHMIS Classification | B3 | |
| US EPA Tier II Hazards | Fire: Yes | Sudden Release of Pressure: No |

Safety Data Sheet

Astro EZ Topcoat

SDS Revision Date:

10/23/2019



Reactive: No
Immediate (Acute): No
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Pennsylvania RTK Substances (>1%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H226 Flammable liquid and vapor.

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material in any process, unless specified in the text.

End of Document