

Safety Data Sheet
Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



Identification

1.1. Product identifier

Product Identity

62860005000 Astrolane 100% Solids Topcoat

Alternate Names

Contents: 62860005000-A Astrolane 100% Solids Topcoat Activator and 62860005000-R Astrolane 100% Solids 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)

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

Customer Service: Brunswick Bowling Products, LLC

231-725-4966

Please see attached Safety Data Sheets for the kit components

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



1. Identification

1.1. Product identifier

Product Identity Astrolane 100% Solids Topcoat Activator
Alternate Names Product Code: 62860005000-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) US: 1-800-255-3924
International: +01-813-248-0585

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

2. Hazard(s) identification

2.1. Classification of the substance or mixture

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)

2.2. Label elements

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



Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



Danger

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]:

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

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]:

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

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

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).

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

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

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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.

[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.

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



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
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]
Benzene, 1,1'-methylenebis[isocyanato-, homopolymer CAS Number: 0039310-05-9	10 - 25	Resp. Sens. 1;H334	[1]
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]

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

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



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

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

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.

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).

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



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.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000101-68-8	Diphenylmethanediisocyanate	OSHA	C 0.2 mg/m ³ (0.02 ppm)
		ACGIH	TWA: 0.005 ppm Ceiling: 0.01 ppm Skin, S
		NIOSH	TWA 0.05 mg/m ³ (0.005 ppm) C 0.2 mg/m ³ (0.020 ppm) [10-minute]
		Supplier	No Established Limit
0026447-40-5	Diphenylmethane diisocyanate, mixed isomers	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



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

Carcinogen Data

CAS No.	Ingredient	Source	Value
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;
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;
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;

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

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



Initial boiling point and boiling range	390°F
Flash Point	200°F TCC
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Established Upper Explosive Limit: Not Established
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	1.18 (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
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.

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



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.

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)	4,700.00, Rat - Category: 5	No data available	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

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)	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

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Diphenylmethanediisocyanate - (101-68-8)	Not Available	129.70, 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

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
14.1. UN number	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Sub Class: Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No;		
14.6. Special precautions for user	No further information		

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	D2A
US EPA Tier II Hazards	Fire: No 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:

Diphenylmethanediisocyanate

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%):

Diphenylmethanediisocyanate

Pennsylvania RTK Substances (>1%):

Safety Data Sheet
Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



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:

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.

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
Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



1. Identification

1.1. Product identifier

Product Identity Astrolane 100 Topcoat
Alternate Names Product Code: 62860005000-R

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

Intended use Bowling Lane Finish. 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

No applicable GHS categories.

2.2. Label elements

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

No applicable GHS categories.

[Prevention]:

No GHS prevention statements

[Response]:

No GHS response statements

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



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
Castor oil CAS Number: 0008001-79-4	10 - 25	Not Classified	[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

Rinse mouth with water and drink plenty of water.

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.

Safety Data Sheet
Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



5. Fire-fighting measures

5.1. Extinguishing media

Use extinguishing media appropriate to local circumstances and the surrounding environment.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Carbon Oxides

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. ----

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.

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.

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: No data available.

Store in a well-ventilated place. Keep cool.

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
0008001-79-4	Castor oil	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Contains mineral oil. The exposure limits for oil mist are 5 mg/m³ OSHA PEL and 10 mg/m³ ACGIH.

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.

Safety Data Sheet
Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



9. Physical and chemical properties

Appearance	Clear to Light Yellow Liquid
Odor	Oily
Odor threshold	Not determined
pH	Not Measured
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	Not Measured
Flash Point	Not Flammable
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Applicable Upper Explosive Limit: Not Applicable
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Specific Gravity	1.01 (H ₂ O = 1)
Solubility in Water	Soluble
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
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

No data available.

10.5. Incompatible materials

No data available.

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



10.6. Hazardous decomposition products

Carbon Oxides

11. Toxicological information

Acute toxicity

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).

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
Castor oil - (8001-79-4)	No data available	No data available	No data available	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value
0008001-79-4	Castor oil	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)	---	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

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Castor oil - (8001-79-4)	Not Available	Not Available	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

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	Not Regulated	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No;		

Safety Data Sheet

Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



14.6. Special precautions for user

No further information

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	Not Regulated
US EPA Tier II Hazards	Fire: No Sudden Release of Pressure: No 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:

mercury compounds

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%):

mercury compounds

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.

Safety Data Sheet
Astrolane 100% Solids Topcoat

SDS Revision Date:

09/11/2016



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:

Not applicable

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