

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. Product identifier:  
**Astrolane WB Approach Finish (4 Gallons)**
- Alternate names: Astrolane WB Approach Finish (1 Gallon)
- Product Code: 62860019000; 62860019001
- 1.2. Relevant identified uses of the mixture and uses advised against:  
 Water-borne coatings. Restricted to professional users.
- 1.3. Details of the supplier of the safety data sheet:  
**Brunswick Bowling Products, LLC**  
 525 W. Laketon Ave.  
 Muskegon, MI 49441. USA
- 1.3.1. Responsible person: -  
 E-mail: [brunswick.hu@brunswickbowling.com](mailto:brunswick.hu@brunswickbowling.com)
- 1.4. Emergency telephone number: 24 hour Emergency Telephone No.: CHEMTEL +1 813-248-0585  
 Customer Service: Brunswick Bowling Products, LLC: 231-725-4966

### SECTION 2: HAZARDS IDENTIFICATION

- 2.1. Classification of the mixture:
- Classification according to Regulation 1272/2008/EC (CLP):  
 Acute toxicity 4 – H332  
 Skin irritation 2 – H315  
 Serious eye damage 1 – H318  
 Reproductive toxicity 1B – H360D  
 Specific target organ toxicity (STOT) – single exposure 3 – H335

**Warning H statements:**

**H315** – Causes skin irritation.

**H318** – Causes serious eye damage.

**H332** – Harmful if inhaled.

**H335** – May cause respiratory irritation.

**H360D** – May damage the unborn child.

- 2.2. Label elements:

**Components which define the hazards: 1-methyl-2-pyrrolidone; Triethylamine**



DANGER

**Warning H statements:**

**H315** – Causes skin irritation.

**H318** – Causes serious eye damage.

**H332** – Harmful if inhaled.

**H335** – May cause respiratory irritation.

**H360D** – May damage the unborn child.

**Precautionary P statements:****P201** – Obtain special instructions before use.**P202** – Do not handle until all safety precautions have been read and understood.**P261** – Avoid breathing dust/ fume/gas/mist/ vapours/spray.**P264** – Wash thoroughly after handling.**P271** – Use only outdoors or in a well-ventilated area.**P280** – Wear protective gloves/ eye protection/face protection.**P302 + P352** – IF ON SKIN: Wash with plenty of soap and water.**P332 + P313** – If skin irritation occurs: Get medical advice/attention.**P304 + P340 + P312** – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.**P305 + P351 + P338** – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P310** – Immediately call a POISON CENTER/doctor.**P308 + P313** – IF exposed or concerned: Get medical advice/attention.**P321** – Specific treatment (see information on this label).**P362 + P364** – Take off contaminated clothing and wash it before reuse.**P403 + P233** – Store in a well-ventilated place. Keep container tightly closed.**P405** – Store locked up.**P501** – Dispose of contents/container in accordance with local / national regulations.

"Restricted to professional users".

2.3. Other hazards:

The product has no other known specific hazards for human or environment.

Results of PBT and vPvB assessment: this product contains no PBT/vPvB chemicals.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substance:

Not applicable.

3.2. Mixture:

Description	CAS number	EU number	REACH reg. nr.	Conc. (%)	Classification: 1272/2008/EC (CLP)		
					Hazard pict.	Hazard cat.	H phrase
<b>1-methyl-2-pyrrolidone*</b> Index number: 606-021-00-7	872-50-4	212-828-1	-	25 - 50	GHS08 GHS07 Danger	Repr. 1B Eye Irrit. 2 STOT SE 3 Skin Irrit. 2	H360D H319 H335 H315
<b>Triethylamine*</b> Index number: 612-004-00-5	121-44-8	204-469-4	-	1 - 5	GHS02 GHS05 GHS07 Danger	Flam. Liq. 2 Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Skin Corr 1A	H225 H332 H312 H302 H314

\*: Substance having occupational exposure limit value.

Specific concentration limit:

**1-methyl-2-pyrrolidone**

STOT SE 3; H335: C ≥ 10 %

**Triethylamine**

STOT SE 3; H335: C ≥ 1 %

For the full text of H phrases: see Section 16.

#### SECTION 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.

###### IN CASE OF INGESTION:

###### Measures:

- Rinse mouth. Call a physician or Poison Control Centre immediately.
- DO NOT induce vomiting unless advised by a physician.

###### IN CASE OF INHALATION:

###### Measures:

- 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.

###### IN CASE OF SKIN CONTACT:

###### Measures:

- 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.

###### IN CASE OF EYE CONTACT:

###### Measures:

- In case of contact with eyes flush with water holding eyelids apart and moving the eyeballs (for at least 15 minutes).
- Obtain medical help.

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

###### **Overview:**

Inhalation: Harmful if inhaled. May cause respiratory irritation.

Eyes: Causes serious eye damage.

Skin: Causes skin irritation.

###### **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.

##### 4.3. Indication of any immediate medical attention and special treatment needed:

Treat symptomatically. May cause sensitization by inhalation and skin contact. See section 2 for further details.

#### SECTION 5: FIREFIGHTING MEASURES

##### 5.1. Extinguishing media:

###### 5.1.1. Suitable extinguishing media:

Foam, CO<sub>2</sub>, dry chemical, water mist.

###### 5.1.2. Unsuitable extinguishing media:

None known.

##### 5.2. Special hazards arising from the substance or mixture:

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

The formation of dangerous decomposition products greatly depends on the circumstances of the combustion. A complex mixture of airborne solid, liquid and gas substances may occur, such as carbon monoxide, carbon dioxide and unidentified compounds.

##### 5.3. Advise for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

##### 6.1. Personal precautions, protective equipment and emergency procedures:

###### 6.1.1. For non-emergency personnel:

Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.

###### 6.1.2. For emergency responders:

Ensure adequate ventilation.

Avoid contact with skin, eyes and clothing.

- 6.2. Environmental precautions:  
Do not allow spills to enter drains or waterways.
- 6.3. Methods and material for containment and cleaning up:  
Collect the spilled mixture mechanically, then place the collected waste into appropriate, labelled, closable hazardous waste container till proper removal/disposal.
- 6.4. Reference to other sections:  
For further and detailed information see section 8 and 13.

## SECTION 7: HANDLING AND STORAGE

- 7.1. Precautions for safe handling:  
Observe conventional hygiene precautions.  
Wash hands before eating, drinking, smoking or using toilet.  
Promptly remove soiled clothing and wash thoroughly before reuse.  
Technical measures:  
Ensure adequate ventilation, especially in confined areas.  
Precautions against fire and explosion:  
No special measures required.  
See section 2 for further details.
- 7.2. Conditions for safe storage, including any incompatibilities:  
Technical measures and storage condition:  
Handle containers carefully to prevent damage and spillage.  
Keep containers tightly closed in a cool, well-ventilated place.  
Incompatible materials: none known.  
Packaging material: no special prescriptions.  
See section 2 for further details.
- 7.3. Specific end use(s):  
No specific instructions available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1. Control parameters:

Occupational exposure limit values:

**1-methyl-2-pyrrolidone** (CAS: 872-50-4): 8 hours: 40 mg/m<sup>3</sup>, 10 ppm; Short term: 80 mg/m<sup>3</sup>, 20 ppm; skin (2009/161/EC)

**Triethylamine** (CAS: 121-44-8): 8 hours: 8,4 mg/m<sup>3</sup>, 2 ppm; Short term: 12,6 mg/m<sup>3</sup>, 3 ppm; skin (2000/39/EC)

DNEL		Routes of exposure	Exposure frequency:	Remarks:
Worker	Consumer			
no data available	no data available	Dermal	Short term (acute) Long term (repeated)	no data available
no data available	no data available	Inhalative	Short term (acute) Long term (repeated)	no data available
no data available	no data available	Oral	Short term (acute) Long term (repeated)	no data available

PNEC			Exposure frequency:	Remarks:
Water	Soil	Air		
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available
no data available	no data available	no data available	Short term (single use) Long term (continuous)	no data available

- 8.2. Exposure controls:  
In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

## 8.2.1. Appropriate engineering controls:

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin.

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. 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.

## 8.2.2. Individual protection measures, such as personal protective equipment:

1. Eye/face protection: use appropriate protective glasses with side shields (EN 166).
2. Skin protection:
  - a. Hand protection: use appropriate chemical resistant protective gloves (where risk of splashing) (EN 374).
  - b. Other: use appropriate chemical resistant protective boots and apron (where risk of splashing).
3. Respiratory protection: 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.
4. Thermal hazards: none known.

## 8.2.3. Environmental exposure controls:

No specific prescription.

**The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions an expert's advice should be sought out before deciding upon further protective measures.**

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties:

Parameter		Test method:	Remarks:
1. <b>Appearance:</b>	clear liquid		
2. <b>Odour:</b>	solvent		
3. Odour threshold:	no data available		
4. pH value:	no data available		
5. Melting point/ freezing point:	no data available		
6. Initial boiling point and boiling range:	88,8 - 201,6 °C/ 192 - 395 °F		
7. Flash point:	96,1 °C / 205 °F	TCC	
8. Evaporation rate:	> 1	Ether = 1	
9. Flammability (solid, gas):	not applicable		
10. Upper/lower flammability or explosive limits:	Lower: 1,1 % Upper: 13,74 %		
11. Vapour pressure:	no data available		
12. Vapour density:	> 1		
13. Relative density:	1,09	H <sub>2</sub> O = 1	
14. Solubility(ies):	completely soluble in water		
15. Partition coefficient: n-octanol/water:	no data available		
16. Auto-ignition temperature:	no data available		
17. Decomposition temperature:	no data available		
18. Viscosity:	no data available		
19. Explosive properties:	no data available		
20. Oxidizing properties:	no data available		

9.2. Other information:

VOC: 444,556 g/l (3,71 lb/gal) (coating)  
% Volatile (by volume) 71,843 %  
% Volatile (by weight) 67,653 %

**SECTION 10: STABILITY AND REACTIVITY**

- 10.1. Reactivity:  
Hazardous polymerization will not occur.
- 10.2. Chemical stability:  
Stable within normal temperature and general work conditions.
- 10.3. Possibility of hazardous reactions:  
None known.
- 10.4. Conditions to avoid:  
None known.
- 10.5. Incompatible materials:  
None known.
- 10.6. Hazardous decomposition products:  
None known.

**SECTION 11: TOXICOLOGICAL INFORMATION**

- 11.1. Information on toxicological effects:  
Acute toxicity: harmful if inhaled.  
Skin corrosion/irritation: causes skin irritation.  
Serious eye damage/eye irritation: causes serious eye damage.  
Respiratory or skin sensitisation: none known.  
Germ cell mutagenicity: none known.  
Carcinogenicity: none known.  
Reproductive toxicity: may damage the unborn child.  
STOT-single exposure: may cause respiratory irritation.  
STOT-repeated exposure: none known.  
Aspiration hazard: none known.
- 11.1.1. For substances subject to registration, brief summaries of the information derived from the test conducted:  
No data available.
- 11.1.2. Relevant toxicological properties of the hazardous substances:  
Acute toxicity:  
**1-methyl-2-pyrrolidone** (CAS: 872-50-4):  
LD50 (oral, rat): 3914 mg/kg  
LD50 (dermal, rabbit): 8000 mg/kg  
LC50 (inhalation, rat): 5100 ppm (vapour)  
**Triethylamine** (CAS: 121-44-8):  
LD50 (oral, rat): 730 mg/kg  
LD50 (dermal, rabbit): 200 mg/kg  
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).  
Carcinogen data:

CAS No.	Ingredient	Source	Value
121-44-8	Triethylamine	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
872-50-4	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

- 11.1.3. Information on likely routes of exposure:  
Ingestion, inhalation, skin contact, eye contact.
- 11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:  
No data available.
- 11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:  
Causes skin irritation.  
Causes serious eye damage.  
Harmful if inhaled.  
May cause respiratory irritation.

May damage the unborn child.

- 11.1.6. Interactive effects:  
No data available.
- 11.1.7. Absence of specific data:  
No information.
- 11.1.8. Other information:  
No data available.

## SECTION 12: ECOLOGICAL INFORMATION

- 12.1. Toxicity:  
No data available about the product.  
Information about the components:  
**1-methyl-2-pyrrolidone** (CAS: 872-50-4):  
LC50 (Leuciscus idus): 500 mg/l/96 h  
EC50 (Daphnia magna): 1,23 mg/l/48 h  
ErC50 (Scenedesmus subspicatus): 500 mg/l/72 ó  
**Triethylamine** (CAS: 121-44-8):  
LC50 (Pimephales promelas): 43,7 mg/l/96 h  
EC50 (Daphnia magna): 200 mg/l/48 h
- 12.2. Persistence and degradability:  
No data available.
- 12.3. Bioaccumulation potential:  
No data available.
- 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.

## SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1. Waste treatment methods:  
Disposal according to the local regulations.
- 13.1.1. Information regarding the disposal of the product:  
Observe all federal, state and local regulations when disposing of this product.  
European Waste Code:  
For this product no waste disposal key according the European Waste Catalogue (EWC) can be determined, as only the purpose of application defined by the user enables an allocation. The European waste code number has to be determined after a discussion with a specialist dealing with waste disposal.
- 13.1.2. Information regarding the disposal of the packaging:  
Dispose according to the relevant regulations.
- 13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:  
None known.
- 13.1.4. Sewage disposal:  
None known.
- 13.1.5. Special precautions for any recommended waste treatment:  
No data available.

## SECTION 14: TRANSPORT INFORMATION

**Not dangerous good in sense of the transport regulations.**

- 14.1. UN Number:  
None.
- 14.2. UN proper shipping name:  
None.
- 14.3. Transport hazard class(es):  
None.
- 14.4. Packaging group:  
None.
- 14.5. Environmental hazards:  
Marine Pollutant: no.
- 14.6. Special precautions for user:  
No relevant information available.
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:



Not applicable.

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

SVHC (Substances of Very High Concern): 1-methyl-2-pyrrolidone (CAS: 872-50-4)

The mixture contains a component, which is listed in Annex XVII of the Regulation 1907/2006 / EC of the European Parliament and of the Council, therefore it is subject to restrictions: 1-methyl-2-pyrrolidone (CAS: 872-50-4)

(see Reg. 552/2009/EC, item nr. 30 - Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as toxic to reproduction category 1A or 1B)

### 15.2. Chemical safety assessment: no information available.

## SECTION 16: OTHER INFORMATION

Information regarding the revision of the safety data sheet:

The safety data sheet has been revised according to Regulation (EU) 2015/830 (Section 1-16).

Full text of the abbreviations in the safety data sheet:

DNEL: Derived no effect level. PNEC: Predicted no effect concentration. CMR effects: carcinogenicity, mutagenicity and toxicity for reproduction. PBT: Persistent, bioaccumulative and toxic. vPvB: Very Persistent, Very Bioaccumulative. n.d.: not defined. n.a.: not applicable.

Data sources:

previous version of the safety data sheet (11. 09. 2016.)

Methods used for the classification according to Regulation 1272/2008/EC:

Acute toxicity 4 - H332	The manufacturer's classification
Skin irritation 2 - H315	Based on calculation method
Serious eye damage 1 - H318	Based on calculation method
Reproductive toxicity 1B - H360D	Based on calculation method
Specific target organ toxicity (STOT) - single exposure 3 - H335	Based on calculation method

Relevant H-Phrases (number and full text) of Section 2 and 3:

**H225** - Highly flammable liquid and vapour.

**H302** - Harmful if swallowed.

**H312** - Harmful in contact with skin.

**H314** - Causes severe skin burns and eye damage.

**H315** - Causes skin irritation.

**H318** - Causes serious eye damage.

**H319** - Causes serious eye irritation.

**H332** - Harmful if inhaled.



**H335** – May cause respiratory irritation.

**H360D** – May damage the unborn child.

Training advice: no data available.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

Safety data sheet was prepared by: ToxInfo Kft.

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