U-300 ULTRA HIGH SOLIDS UV TOPCOAT

SDS Revision Date:

02/02/2017



1. Identification

1.1. Product identifier	
Product Identity	PKG U-300 ULTRA HIGH SOLIDS UV TOPCOAT 5 GL
Alternate Names	Product Code: 62860195005
1.2. Relevant identified uses of the substance or mixt	ure and uses advised against
Intended use	Polyurethane resin
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

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 of breathing difficulties if inhaled.
Carc. 2;H351	Suspected of causing cancer.
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: (hearing organs, respiratory tract)

U-300 ULTRA HIGH SOLIDS UV TOPCOAT

SDS Revision Date:

02/02/2017



2.2. Label elements



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.

H351 Suspected of causing cancer.

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

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P233 Keep container tightly closed.

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.

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.

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.

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

U-300 ULTRA HIGH SOLIDS UV TOPCOAT

SDS Revision Date:

02/02/2017



P308+313 IF exposed or concerned: 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.

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

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	
Urethane polymer CAS Number: Proprietary	25 - 50	Skin Irrit. 2;H315 Skin Sens. 1;H317 Eye Irrit. 2;H319 Resp. Sens. 1;H334 STOT SE 3;H335 Carc. 2;H351 STOT RE 2;H373	[1]	
Xylene CAS Number: 0001330-20-7	25 - 50	Flam. Liq. 3;H226 Acute Tox. 4;H332 Acute Tox. 4;H312 Skin Irrit. 2;H315	[1][2]	
Ethyl Benzene CAS Number: 0000100-41-4	1 - 5	Flam. Liq. 2;H225 Acute Tox. 4;H332 STOT RE 2;H373 Asp. Tox. 1;H304	[1][2]	
Propylene glycol monomethyl ether acetate CAS Number: 0000108-65-6	1 - 5	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.

U-300 ULTRA HIGH SOLIDS UV TOPCOAT

SDS Revision Date:

02/02/2017



	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	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
4.2. Most importa	int symptoms and effects, both acute and delayed
Overview	 <u>Inhalation:</u> Causes respiratory tract irritation. The solvent vapors can be harmful and cause headache, nausea, and intoxication. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. May cause sensitization by inhalation and skin contact. <u>Skin contact:</u> Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause allergic skin reaction in susceptible individuals. <u>Eye contact:</u> Causes eye irritation. Prolonged eye contact may cause severe eye damage. Ingestion: May cause gastrointestinal tract irritation if swallowed. Aspirated material can enter the lungs and result in pneumonitis. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
	the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. 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.

U-300 ULTRA HIGH SOLIDS UV TOPCOAT

SDS Revision Date:

02/02/2017



5. Fire-fighting measures

5.1. Extinguishing media

Water spray (fog), foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Electrostatic charge may build-up during handling. Grounding of equipment is recommended.

Hazardous decomposition: Oxides of carbon. Irritating and toxic gases or fumes may be released during a fire. Isocyanate vapors.

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

Keep container tightly closed.

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.

5.3. Advice for fire-fighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Isolate area. Keep unnecessary personnel away.

Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Avoid water contamination in closed containers or confined areas.

ERG Guide No. 127

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Electrostatic charge may build-up during handling. Grounding of equipment is recommended.

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

Electrostatic charge may build-up during handling. Grounding of equipment is recommended.

Isolate area. Keep unnecessary personnel away. Eliminate all ignition sources (flames, hot surfaces, and sources of electrical, static or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to

SDS Revision Date:

02/02/2017



covered metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams and groundwater with spilled material or used absorbent. Wear appropriate personal protective equipment.

7. Handling and storage

7.1. Precautions for safe handling

<u>Handling:</u> Make sure containers are properly grounded before use or transfer of material. Wash thoroughly after handling. Keep container closed. Do not breathe gas/fumes/vapor/spray. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation.

<u>Storage:</u> Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Do not pressurize, cut, heat or weld containers. Empty product containers may contain product residue. Do not reuse empty containers. Ground and bond metal containers for liquid transfer to avoid static sparks. Do not let moisture contaminate this material. Product reacts with water to release carbon dioxide, which could build up pressure in closed containers and lead to bursting. Do not reuseal if moisture contamination is suspected.

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

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Strong acids, alkalies and oxidizing agents. Amines. Alcohols. Water. Moisture.

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
0000100-41-4	Benzene, ethyl-	OSHA	TWA 100 ppm (435 mg/m3) STEL 125 ppm
		ACGIH	TWA: 20 ppm 2B, Revised 2011,
		NIOSH	TWA 100 ppm (435 mg/m3) ST 125 ppm (545 mg/m3)
		Supplier	No Established Limit
	Propylene glycol monomethyl ether acetate	OSHA	No Established Limit
		ACGIH	TWA: 50 ppm STEL: 75 ppm
		NIOSH	No Established Limit
		Supplier	No Established Limit
0001330-20-7	1330-20-7 Xylene		STEL 150 ppm
		ACGIH	TWA: 100 ppm STEL: 150 ppm
		NIOSH	No Established Limit
		Supplier	No Established Limit

SDS Revision Date:

02/02/2017



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Proprietary	Urethane polymer		OSHA	No Established Limit
			ACGIH	No Established Limit
			NIOSH	No Established Limit
			Supplier	No Established Limit
8.2. Exposu	e controls			
Respiratory		Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Obsert OSHA regulations for respirator use (29 CFR 1910.134).		
Eyes		Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.		
Skin		Neoprene, Butyl-rubber, or nitrile-rubber gloves. Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.		
Engineering	Controls	Work should be done in an adequately ventilated area (i.e., ventilation sufficient to mai concentrations below one half of the PEL and other relevant standards). Local exhaus ventilation is recommended when general ventilation is not sufficient to control airborn contamination. Persons with asthmatic-type conditions, chronic bronchitis, other chron respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with isocyanates. Once a person is diagnosed as sensitized to an isocyanate, further exposure can be permitted.		he PEL and other relevant standards). Local exhaust general ventilation is not sufficient to control airborne matic-type conditions, chronic bronchitis, other chronic skin eczema or sensitization should be excluded from person is diagnosed as sensitized to an isocyanate, no
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	2 for further	details.		

9. Physical and chemical properties

Appearance Odor Odor threshold pH Melting point / freezing point Initial boiling point and boiling range Flash Point Evaporation rate (Ether = 1) Flammability (solid, gas) Upper/lower flammability or explosive limits

Vapor pressure (Pa)

Unknown Liquid Solvent Not determined Not Measured -27.4 °F (-33 °C) estimated 282.74 °F (139.3 °C) estimated 82.9 °F (28.3 °C) Slower than diethyl ether Not Applicable **Lower Explosive Limit:** Not available. **Upper Explosive Limit:** Not available. 10.5 hPa estimated

SDS Revision Date:

02/02/2017

Brunswick 🖻

Vapor Density Heavier than air **Specific Gravity** 1.1 estimated Not soluble. Reacts with water to liberate carbon dioxide **Solubility in Water** gas. Partition coefficient n-octanol/water (Log Kow) Not Measured Auto-ignition temperature Not Measured **Decomposition temperature** Not Measured Viscosity (cSt) Not Measured **VOC Content** 38 % (does not include exempt VOC) estimated Percent Volatile (by volume) 50 % estimated 1.10 g/cm3 estimated Density 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

Heat, flames, sparks and other sources of ignition. Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

10.5. Incompatible materials

Strong acids, alkalies and oxidizing agents. Amines. Alcohols. Water. Moisture.

10.6. Hazardous decomposition products

Oxides of carbon. Irritating and toxic gases or fumes may be released during a fire. Isocyanate vapors.

U-300 ULTRA HIGH SOLIDS UV TOPCOAT

SDS Revision Date:

02/02/2017



11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

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
Urethane polymer - (Proprietary)	No data available	No data available	No data available	No data available	No data available
Xylene - (1330-20-7)	4,299.00, Rat - Category: 5	1,548.00, Rabbit - Category: 4	No data available	20.00, Rat - Category: NA	5,000.00, Rat - Category: 4
Benzene, ethyl (100-41-4)	3,500.00, Rat - Category: 5	15,433.00, Rabbit - Category: NA	17.20, Rat - Category: 4	No data available	4,000.00, Rat - Category: NA
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

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000100-41-4	Benzene, ethyl-	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No;
0000108-65-6 Propylene glycol monomethyl ether acetate	Propylene glycol monomethyl ether	OSHA	Select Carcinogen: No
	acetate	NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0001330-20-7 Xylene	Xylene	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;
Proprietary	Urethane polymer	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;

SDS Revision Date:

02/02/2017

Brunswick

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	2	Suspected of causing cancer.
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

This product is not classified as environmentally hazardous. Product EC50 (Crustacea) 100 mg/l 48 hr – Daphnia - estimated LC50 146 mg/l 96 hr – fish - estimated

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Urethane polymer - (Proprietary)	Not Available	Not Available	Not Available
Xylene - (1330-20-7)	3.30, Oncorhynchus mykiss	8.50, Palaemonetes pugio	100.00 (72 hr), Chlorococcales
Benzene, ethyl (100-41-4)	4.20, Oncorhynchus mykiss	2.93, Daphnia magna	3.60 (96 hr), Pseudokirchneriella subcapitata
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.

U-300 ULTRA HIGH SOLIDS UV TOPCOAT

SDS Revision Date:

02/02/2017



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

Destroy by liquid incineration. Use absorbent material and deposit in toxic landfill in accordance with local, state, and federal regulations.

14. Transport information

DOT (Domestic Surface Transportation) 14.1. UN number UN1866 14.2. UN proper UN1866, Resin solution, shipping name flammable, 3, III 14.3. Transport hazard DOT Hazard Class: 3 class(es) 14.4. Packing group Ш 14.5. Environmental hazards IMDG Marine Pollutant: No: 14.6. Special precautions for user

No further information

IMO / IMDG (Ocean Transportation) UN1866 UN1866, Resin solution, flammable, 3, III IMDG: 3 Sub Class: Not Applicable III

ICAO/IATA

UN1866 UN1866, Resin solution, flammable, 3, III **Air Class:** 3 **Packing Instruction**: 355 III

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	B2 D2A

SDS Revision Date:

02/02/2017



US EPA Tier II Hazards

Fire: Yes Sudden Release of Pressure: No Reactive: No Immediate (Acute): Yes Delayed (Chronic): Yes

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:

Benzene, ethyl-

Xylene

Proposition 65 - Carcinogens (>0.0%):

Benzene, ethyl-

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%):

Benzene, ethyl-

Xylene

Pennsylvania RTK Substances (>1%):

Benzene, ethyl-

Xylene

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:

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

U-300 ULTRA HIGH SOLIDS UV TOPCOAT

SDS Revision Date:

02/02/2017



H312 Harmful in contact with skin.

- 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.
- H351 Suspected of causing cancer.

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.

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