

SAFETY DATA SHEET

Tuffbond 316B

SECTION 1: IDENTIFICATION

1.1. **Product identifier** Trade name: Tuffbond 316B Product no.: MS-316B 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the Adhesive substance or mixture: Restricted to professional users. Uses advised against : None known. 1.3. Details of the supplier of the safety data sheet Company and address: **Hernon Manufacturing Inc** 121 Tech Drive FL 32771 Sanford USA T: +1-407-322-4000 www.hernon.com Hernon SDS Coordinator Contact person: E-mail: customerservice@hernon.com SDS date: 3/26/2025 SDS Version: 1.0 **Emergency telephone number** 1.4.

Contact the poison control at 1-800-222-1222 (24/7) or use the webpoisoncontrol (triage.webpoisoncontrol.org) to get specific guidance for your case. VelocityEHS:

+1-800-255-3924 (USA) +1-813-248-0585 (International) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) 400-120-0751 (China) 000-800-100-4086 (India) 800-099-0731 (Mexico) Contract #: (MIS0002665)

SECTION 2: HAZARD(S) IDENTIFICATION

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.1. Classification of the substance or mixture



Skin Irrit. 2; H315, Causes skin irritation. Skin Sens. 1; H317, May cause an allergic skin reaction. Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s):	
Signal word:	Danger
Hazard statement(s):	Causes skin irritation. (H315) May cause an allergic skin reaction. (H317) Causes serious eye damage. (H318)
Precautionary statement(s):	
General:	-
Prevention:	Avoid breathing mist/vapour. (P261) Wash hands and exposed skin thoroughly after handling. (P264) Contaminated work clothing should not be allowed out of the workplace. (P272) Wear eye protection/protective clothing. (P280)
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338) Immediately call a POISON CENTER/doctor. (P310) If skin irritation or rash occurs: Get medical advice/attention. (P333+P313) Take off contaminated clothing and wash it before reuse. (P362+P364)
Storage:	-
Disposal:	Dispose of contents/container in accordance with local regulation (P501)
Additional labelling:	Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Polyamide Resin	CAS No.: 68082-29-1	60-100%	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Eye Dam. 1, H318	[19]
Triethylenetetramine	CAS No.: 112-24-3	3-7%	Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317	



benzyl alcohol	CAS No.: 100-51-6	1-5%	Acute Tox. 4, H302	
			Eye Irrit. 2, H319	
			Acute Tox. 4, H332	

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: FIRST-AID MEASURES

4.1. Description of first aid measures General information: If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink. Upon breathing difficulties or irritation of the respiratory Inhalation: tract: Bring the person into fresh air and stay with him/her. Skin contact: IF ON SKIN: Wash with plenty of water and soap. Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention. If in eyes: Flush eyes with plenty of water or salt water (20-Eye contact: 30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport. If the person is conscious, rinse the mouth with water and Ingestion: stay with the person. Never give the person anything to drink. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material. Burns: Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after



exposure.

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters. If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are: Nitrogen oxides (NO_x) Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances. Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste. See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE



7.1. Precautions for safe handling

Avoid direct contact with the product. Smoking, drinking and consumption of food is not allowed in the work area. See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material:	Always store in containers of the same material as the original container.
Storage conditions:	Keep at temperatures between 7 and 29 °C. Dry, cool and well ventilated Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Protect from moisture.
Incompatible materials:	Strong acids Strong oxidizing agents

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations:	Smoking, drinking and consumption of food is not allowed in the work area.
Exposure scenarios:	There are no exposure scenarios implemented for this product.
Exposure limits:	Occupational exposure limits have not been defined for the substances in this product.
Appropriate technical measures:	Ensure that eyewash stations and safety showers are located within easy reach. Apply standard precautions during use of the product. Avoid inhalation of vapours.
Hygiene measures:	Take off contaminated clothing and wash it before reuse.
Measures to avoid environmental exposure:	No specific requirements.

Individual protection measures, such as personal protective equipment

Generally:	Use only protective equipment with a recognized
	certification mark, e.g. the UL mark.

Respiratory Equipment:

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.

Skin protection:

Recommended	Type/Category	Standards	
-	Protective Clothing		Î

Hand protection: Nitrile Rubber

Eye protection:

Туре	Standards	
Safety glasses with side shields.	EN166	$\overline{\mathbf{\Theta}}$

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

	Physical state:	Liquid
	Color:	Amber
	Odor:	Unpleasant
	Odor threshold (ppm):	No data available
	рН:	No data available
	Density (g/cm³):	0.97
	Kinematic viscosity:	No data available
	Particle characteristics:	No data available
Phase	changes	
	Melting point/freezing point (°F):	No data available
	Softening point/range (°F):	Does not apply to liquids.
	Boiling point (°F):	>300
	Boiling point (°C):	>149
	Vapor pressure:	No data available
	Relative vapor density:	No data available.
	Decomposition temperature (°F):	No data available.
Data o	on fire and explosion hazards	
	Flash point (°F):	>200
	Flash point (°C):	>93.3
	Flammability (°F):	No data available
	Auto-ignition temperature (°F):	No data available
	Explosion limits (% v/v):	No data available



So	ubility	

	Solubility in water:	Slightly soluble
	n-octanol/water coefficient (LogKow):	No data available
	Solubility in fat (g/L):	No data available
9.2.	Other information	
	Evaporation rate (n-butylacetate = 100):	No data available
	Other physical and chemical parameters:	No data available.
	Oxidizing properties:	No data available

SECTION 10: STABILITY AND REACTIVITY

- **10.1. Reactivity** No data available.
- **10.2.** Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage".
- 10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies

None known.

10.4. Conditions to avoid

Incompatible Materials Dry, cool and well ventilated Protect from moisture. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

10.5. Incompatible materials Strong acids Strong oxidizing agents

10.6. Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation



May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Long term effects

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

- **12.1. Toxicity** No data available.
- **12.2. Persistence and degradability** Based on available data, the classification criteria are not met.
- **12.3. Bioaccumulative potential** Based on available data, the classification criteria are not met.
- **12.4.** Mobility in soil No data available.
- **12.5. Results of PBT and vPvB assessment** This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
- **12.6.** Other adverse effects None known.

SECTION 13: DISPOSAL CONSIDERATIONS

RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

Specific labelling

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.



SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
DOT	UN2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyamide Resin)	Transport hazard class: 8 Label: 8 Classification code: C7	III	No	Limited quantitie s: 5 L Tunnel restrictio n code: (E) See below for additiona I informati on.
IMDG	UN2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyamide Resin)	Transport hazard class: 8 Label: 8 Classification code: C7	III	No	Limited quantitie s: 5 L EmS: F-A S-B See below for additiona I informati on.
ΙΑΤΑ	UN2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyamide Resin)	Transport hazard class: 8 Label: 8 Classification code: C7	III	No	See below for additiona l informati on.

* Packing group

** Environmental hazards

Additional information

DOT / See § 172.101 Hazardous Materials Table for any information on special provisions, requirements, or warnings in connection with transport. See § 172.602, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport. IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in



connection with transport.

- **14.6.** Special precautions for user Not applicable.
- **14.7.** Transport in bulk according to IMO instruments No data available.

SECTION 15: REGULATORY INFORMATION

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

15.2. U.S. Federal regulations

TSCA (the non-confidential portion):	Polyamide Resin is listed Triethylenetetramine is listed benzyl alcohol is listed
Clean Air Act:	None of the components are listed
EPCRA Section 302:	None of the components are listed
EPCRA Section 304:	None of the components are listed
EPCRA section 313:	None of the components are listed
CERCLA:	None of the components are listed
Hazardous chemical inventory reporting:	This product is subject to Tier II reporting.

State regulations

	California / Prop. 65:	None of the components are listed
	Massachusetts / Right To Know Act:	Triethylenetetramine is listed benzyl alcohol is listed
	New Jersey / Right To Know Act:	Triethylenetetramine / Substance number: 1908 Triethylenetetramine is on the Special Health Hazard Substance List
	New York / Right To Know Act:	— Triethylenetetramine is listed Triethylenetetramine is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds
	Pennsylvania / Right To Know Act:	— Triethylenetetramine is listed —
15.4.	Restrictions for application Restricted to professional users.	
15.5.	Demands for specific education No specific requirements.	
15.6. /	Additional information Not applicable.	
15.7.	Chemical safety assessment No	



15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H302, Harmful if swallowed.

H312, Harmful in contact with skin.

H314, Causes severe skin burns and eye damage.

H315, Causes skin irritation.

H317, May cause an allergic skin reaction.

H318, Causes serious eye damage.

H319, Causes serious eye irritation.

H332, Harmful if inhaled.

The full text of identified uses as mentioned in section 1

None known.

Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation

EINECS = European Inventory of Existing Commercial chemical Substances

EPCRA = Emergency Planning and Community Right-To-Know Act

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HCIS = Hazardous Chemical Information System

HNOC = Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978. ("Marpol" = marine pollution)

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OECD = Organisation for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

PBT = Persistent, Bioaccumulative and Toxic

RCRA = Resource Conservation and Recovery Act

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number

RRIN = REACH REgistration Number

SARA = Superfund Amendments and Reauthorization Act

SCL = A specific concentration limit.

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure



TSCA = The Toxic Substances Control Act

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by HCS (29 CFR 1910.1200).

The safety data sheet is validated by

SDS Coordinator

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification. Country-language: US-en