SAFETY DATA SHEET

Tuffbond 303B

SECTION 1: IDENTIFICATION

1.1. Product identifier

Trade name:	Tuffbond 303B
Product no.:	MS-303B

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

Relevant identified uses of the substance or mixture:	Adhesive 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
Contact person:	Hernon SDS Coordinator
E-mail:	customerservice@hernon.com
SDS date:	3/1/2025
SDS Version:	1.0
Date of previous version:	11/12/2024 (1.0)

1.4. Emergency telephone number

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 Corr. 1B; H314, Causes severe skin burns and eye damage.
Skin Sens. 1; H317, May cause an allergic skin reaction.
Eye Dam. 1; H318, Causes serious eye damage.
Repr. 2; H361, Suspected of damaging fertility or the unborn child.
STOT RE 1; H372, Causes damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazard pictogram(s):

Signal word: Danger

Hazard statement(s):
Causes severe skin burns and eye damage. (H314)
May cause an allergic skin reaction. (H317)
Suspected of damaging fertility or the unborn child. (H361)
Causes damage to organs through prolonged or repeated exposure. (H372)

Precautionary statement(s):

General: -

Prevention:
Obtain special instructions before use. (P201)
Do not breathe vapour/mist. (P260)
Contaminated work clothing should not be allowed out of the workplace. (P272)
Wear eye protection/protective clothing. (P280)

Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. (P301+P330+P331)
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. (P303+P361+P353)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
IF exposed or concerned: Get medical advice/attention. (P308+P313)
Immediately call a POISON CENTER/doctor. (P310)
Get medical advice/attention if you feel unwell. (P314)
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.

2.3. Other hazards

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]
Hydrophobic Amorphous Fumed Silica	CAS No.: 67762-90-7	5-10%		[19]
4-nonylphenol, branched	CAS No.: 84852-15-3	5-10%	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Repr. 2, H361	[19]
Triethylenetetramine	CAS No.: 112-24-3	2-5%	Acute Tox. 4, H312 Skin Corr. 1B, H314 Skin Sens. 1, H317	
2-piperazin-1-ylethylamine	CAS No.: 140-31-8	1-10%	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Repr. 2, H361 STOT RE 1, H372	
Titanium dioxide	CAS No.: 13463-67-7	1-5%		

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.
Inhalation:	Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.
Skin contact:	Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment. Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.
Eye contact:	If in eyes: Flush eyes with plenty of water or salt water (20-30 °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.
Ingestion:	In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.
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.
Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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.
Ensure adequate ventilation, especially in confined areas.
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
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.
Incompatible materials:	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
Titanium dioxide
Long term exposure limit (ACGIH TLV) (mg/m³): 10
Long term exposure limit (NIOSH REL) (mg/m³): Potential occupational carcinogen; (ultrafine particles) / 2.4 (fine) / 0.3 (ultrafine)

Part 1910 - Occupational Safety and Health Standards (29 CFR 1910.1000 TABLE Z-1 - Limits for Air Contaminants)

8.2. ▼Exposure controls
Compliance with the given occupational exposure limits values should be controlled on a regular basis.

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:*	Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.
▼*Appropriate technical measures:*	The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked. 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:	In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.
Measures to avoid environmental exposure:	Keep damming materials near the workplace. If possible, collect spillage during work.

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		

Hand protection:
Nitrile Rubber

Eye protection:

Type	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Color:	Off White
Odor:	Mild
Odor threshold (ppm):	No data available
pH:	No data available
Density (g/cm^3):	1
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:	>50 mmHg (80 °F)
Relative vapor density:	No data available
Decomposition temperature (°F):	No data available

Data on fire and explosion hazards

Flash point (°F):	>200
Flash point (°C):	>93
Flammability (°F):	No data available
Auto-ignition temperature (°F):	No data available
Explosion limits (% v/v):	Not applicable

Solubility

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
Extremes of temperature
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

10.5. Incompatible materials
Strong oxidizing agents
Acids

10.6. Hazardous decomposition products
Thermal decomposition may produce corrosive vapours.

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 severe skin burns and eye damage.

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
Suspected of damaging fertility or the unborn child.

STOT-single exposure
Based on available data, the classification criteria are not met.

STOT-repeated exposure
Causes damage to organs through prolonged or repeated exposure.

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

Long term effects
Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

▼Other information
Titanium dioxide has been classified by IARC as a group 2B carcinogen.

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 information:
DOT	UN2735	AMINES, LIQUID, CORROSIVE, N.O.S. (Polyamide Resin, Triethylenetetramine)	Transport hazard class: 8 Label: 8 Classification code: C7 	III	No	Limited quantities: 5 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN2735	AMINES, LIQUID, CORROSIVE, N.O.S. (Polyamide Resin, Triethylenetetramine)	Transport hazard class: 8 Label: 8 Classification code: C7 	III	No	Limited quantities: 5 L EmS: F-A S-B See below for additional information.
IATA	UN2735	AMINES, LIQUID, CORROSIVE, N.O.S. (Polyamide Resin, Triethylenetetramine)	Transport hazard class: 8 Label: 8 Classification code: C7 	III	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

This product is within scope of the regulations of transport of dangerous goods.
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 Hydrophobic Amorphous Fumed Silica is listed 4-nonylphenol, branched is listed Triethylenetetramine is listed 2-piperazin-1-ylethylamine is listed Titanium dioxide 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:	4-nonylphenol, branched is 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 2-piperazin-1-ylethylamine is listed Titanium dioxide is listed
▼*New Jersey / Right To Know Act:*	Triethylenetetramine / Substance number: 1908 Triethylenetetramine is on the Special Health Hazard Substance List — 2-piperazin-1-ylethylamine / Substance number: 0075 2-piperazin-1-ylethylamine is on the Special Health Hazard Substance List — Titanium dioxide / Substance number: 1861 —
▼*New York / Right To Know Act:*	Triethylenetetramine is listed Triethylenetetramine is regulated with a Treshold Reporting Quantity (TRQ) of: 0 pounds — 2-piperazin-1-ylethylamine is listed 2-piperazin-1-ylethylamine is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds — Titanium dioxide is listed

	Titanium dioxide is regulated with a Treshold Reporting Quantity (TRQ) of: 100 pounds
▼*Pennsylvania / Right To Know Act:*	Triethylenetetramine is listed 2-piperazin-1-ylethylamine is listed Titanium dioxide 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.
H311, Toxic in contact with skin.
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.
H361, Suspected of damaging fertility or the unborn child.
H372, Causes damage to organs through prolonged or repeated exposure.

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
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