

Product Name: DYNABOND Two-Part High Resistance Catalyst

SDS Version No.: 1.0
Issue Date: September 2021
Revision Date: N/A

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DYNABOND Two-Part High Resistance Catalyst

PRODUCT DESCRIPTION: Catalyst

PRODUCT USAGE: Catalyst used with adhesive to bond screen printing mesh to frames

SUPPLIER

NBC Meshtec Americas Inc.

512 Kingsland Drive

Batavia, IL 60510

Website: nbcmeshtec.com

Phone: 1 (800) 235-5056

Fax: 1 (630) 293-5647

24/7 EMERGENCY PHONE CONTACT

1 (800) 535-5053 Infotrac United States and Canada

+1 (352) 323-3500 Infotrac International (Call collect)

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 2A Respiratory

Sensitization, Category 1

Target Organ Toxicity (Single exposure), Category 3

Skin Sensitization, Category 1

Skin Irritation, Category 2

Target Organ Toxicity (Repeated exposure), Category 1

Physical:

Flammable Liquids, Category 2



GHS LABEL

GHS07

GHS08

GHS02

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H319: Causes serious eye irritation.

H225: Highly flammable liquid and vapor.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335: May cause respiratory irritation.

H317: May cause an allergic skin reaction.

H336: May cause drowsiness or dizziness.

H315: Causes skin irritation.

H332: Harmful if inhaled.

H372: Causes damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

PRECAUTIONARY STATEMENT(S)

Prevention:

P264: Wash skin thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P210: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
 P233: Keep container tightly closed.
 P240: Ground and bond container and receiving equipment.
 P241: Use explosion-proof [electrical/ventilating/lighting/...] equipment.
 P242: Use non-sparking tools.
 P243: Take action to prevent static discharges.
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
 P285: In case of inadequate ventilation wear respiratory protection.
 P271: Use only outdoors or in a well-ventilated area.
 P272: Contaminated work clothing should not be allowed out of the workplace.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313: If eye irritation persists: Get medical advice/attention.
 P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P370+P378: In case of fire: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide to extinguish.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor/...
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P362: Take off contaminated clothing.

Storage:

P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:

P501: Dispose of contents/container in accordance with applicable federal/state/local regulations.

3. COMPOSITION INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Polymeric Isocyanates	28 - 41	9016-87-9
Acetic Acid Ethyl Ester	19 - 45	141-78-6
Methylene Bisphenyl Isocyanate	15 - 35	101-68-8
Diphenylmethane-2,4'-di-isocyanate	1 - 10	5873-54-1

4. FIRST AID MEASURES

EYES: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

SKIN: Wash off with soap and plenty of water. Consult a physician.

INGESTION: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

INHALATION: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

HAZARDOUS COMBUSTION PRODUCTS: N/A

FIRE FIGHTING EQUIPMENT: Wear self-contained breathing apparatus for firefighting if necessary.

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Clean surface thoroughly to remove residual contamination.

LARGE SPILL: Wear suitable protective equipment. Contain spill. Soak up with absorbent material and transfer to a container for disposal according to local/state/federal regulations.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapors. Wash thoroughly after handling.

STORAGE: Keep container tightly closed.

SHELF LIFE: 24 months

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
Chemical Name	EXPOSURE LIMITS			
	Type		ppm	mg/m ³
Acetic Acid Ethyl Ester	OSHA PEL	TWA	400	1400
	ACGIH TLV	TWA	400	1440
	Supplier OEL	TWA	NL	NL
		STEL	NL	NL
Methylene Bisphenyl Isocyanate	ACGIH TLV	TWA	0.005	0.051

ENGINEERING CONTROLS: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US).

SKIN: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

RESPIRATORY: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US).

PROTECTIVE CLOTHING: Apron recommended.

WORK HYGIENIC PRACTICES: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when handling this material: (1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. (2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the restroom. (3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Brown

pH: N/A

PERCENT VOLATILE: N/A

FLASH POINT AND METHOD: (50°F)
FLAMMABLE LIMITS: N/A
AUTOIGNITION TEMPERATURE: N/A
VAPOR PRESSURE: N/A
VAPOR DENSITY: N/A
BOILING POINT: N/A
FREEZING POINT: N/A
POUR POINT: N/A
THERMAL DECOMPOSITION: N/A
SOLUBILITY IN WATER: Partial
EVAPORATION RATE: N/A
SPECIFIC GRAVITY: 1.124
VISCOSITY: N/A
(VOC): 336 g/L

10. STABILITY AND REACTIVITY

REACTIVITY: Yes
STABILITY: Stable under recommended storage conditions.
CONDITIONS TO AVOID: Exposure to air. Exposure to moisture.
HAZARDOUS DECOMPOSITION PRODUCTS: N/A
INCOMPATIBLE MATERIALS: Water, amines, strong alkalis, alcohols

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Polymeric Isocyanates			0.49 mg/L [Rat] 4 h
Acetic Acid Ethyl Ester	> 4934 mg/kg	> 20000 mg/kg	> 22.5 mg/L
Methylene Bisphenyl Isocyanate	9200 mg/kg [Rat]		> 2.24 mg/L [rat] 1 h

DERMAL LD₅₀: Not yet determined for this product

ORAL LD₅₀: Not yet determined for this product

INHALATION LC₅₀: Not yet determined for this product

SERIOUS EYE DAMAGE/IRRITATION: CAS # 101-68-8 Serious eye damage/eye irritation Eyes - Rabbit

Result: Moderate eye irritation

RESPIRATORY OR SKIN SENSITISATION: CAS # 101-68-8 Respiratory or skin sensitization

In vivo assay - Guinea pig

Result: May cause sensitization by inhalation.

In vivo assay - Mouse

Result: May cause sensitization by skin contact.

GERM CELL MUTAGENICITY: CAS # 101-68-8 Laboratory experiments have shown mutagenic effects.

Ames test *S. typhimurium*

Result: negative

Mutagenicity (micronucleus test) Rat - male

Result: negative

CARCINOGENICITY

IARC: CAS # 9016-87-9 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Isocyanic acid, polymethylenepolyphenylene ester)

CAS # 101-68-8 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Diphenylmethane-4,4'-diisocyanate)

NTP: Not listed

OSHA: Not listed

REPRODUCTIVE TOXICITY: CAS # 101-68-8

Reproductive toxicity - Rat – Inhalation

Maternal Effects: Other effects.

Specific Developmental Abnormalities: Musculoskeletal system.

12. ECOLOGICAL INFORMATION

BIOACCUMULATION/ACCUMULATION: N/A

AQUATIC TOXICITY (ACUTE)

Notes: CAS # 101-68-8

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0.35 mg/l - 24 h

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

EMPTY CONTAINER: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME:

	DOT CLASSIFICATION
UN number	UN 1133
UN proper shipping name	Adhesives containing flammable liquid
Transport hazard class	3
Packing group	II
Label	

AIR (ICAO/IATA) SHIPPING NAME:

	IATA
UN number	UN 1133
UN proper shipping name	Adhesives containing flammable liquid
Transport hazard class	3
Packing group	II
Passenger air max	5 L
Label	

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: FIRE HAZARD, ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

FIRE: Yes PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Polymeric Isocyanates	28 - 41	9016-87-9
Methylene Bisphenyl Isocyanate	15 - 35	101-68-8

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: None

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Acetic Acid Ethyl Ester	19 - 45	5,000
Methylene Bisphenyl Isocyanate	15 - 35	5,000

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS	TSCA SECTION
Polymeric Isocyanates	9016-87-9	
Acetic Acid Ethyl Ester	141-78-6	12b,
Methylene Bisphenyl Isocyanate	101-68-8	
Diphenylmethane-2,4'-di-isocyanate	5873-54-1	

TSCA REGULATORY: All components of this product are listed on the TSCA Inventory.

REGULATIONS

STATE REGULATIONS: CAS # 9016-87-9 Delaware Air Quality Management, Pennsylvania Right To Know Component, New Jersey Right To Know Component; CAS # 101-68-8 CA Hazardous Substance, Delaware Air Quality Management, Idaho Air Pollutant, Illinois Toxic Air Contaminant, Maine Hazardous Air Pollutant, Massachusetts Hazardous Substance, Minnesota Hazardous Substance, New York Hazardous Substance, Pennsylvania Hazardous Substance, Washington PELs for Air Contaminant, Wisconsin Hazardous Air Contaminant; CAS # 141-78-6 CA Hazardous Substance, Delaware Air Quality Management, Idaho Air Pollutant, Maine Hazardous Air Pollutant, Massachusetts Hazardous Substance, Minnesota Hazardous Substance, New York Hazardous Substance, North Carolina Toxic Air Contaminant, Pennsylvania Hazardous Substance, Washington PELs for Air Contaminant

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



Flammable
Liquid



Toxic

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): Controlled Product

WHMIS CLASS: B, D

DOMESTIC SUBSTANCE LIST (INVENTORY): All components of this product are listed on the Domestic Substances List.

16. OTHER INFORMATION

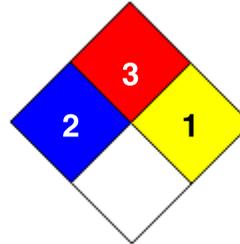
PREPARED BY: SDS Regulatory Specialist
REVISION SUMMARY: N/A

Date Revised: 09/14/2021

HMIS RATING

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	1
PERSONAL PROTECTION	X

NFPA CODES



HMIS RATINGS NOTES: (X) - site specific

MANUFACTURER DISCLAIMER: The information contained in the present sheet is based on our knowledge, on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.