

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

1. Product and Company Identification

Product Name: MIRACLE BOND 1310 (Part A)

Product Use: General Purpose

Company Identification:
 ADHESIVES TECHNOLOGY CORP.
 450 East Copans Road
 Pompano Beach, FL 33064
 Contact Phone: 1.800.892.1880
 (9:00a.m. – 5:00p.m. EST)

Emergency Phone:
 Chem-Tel:
 1.800.255.3924 (24hrs)

2. Hazards Identification (Part A)

GHS Classification

Health	Physical	Environmental
Skin Irritant Cat 2 Eye Irritant Cat 2B Skin Sensitizer Cat 1B Carcinogen Cat 2	Not Classified	Not Classified

GHS Label:

Warning:



Skin Sensitizer
 Eye and Skin Irritant



Suspected Carcinogen

Emergency Overview

May cause skin sensitization
 Causes skin and eye irritation
 May cause cancer
 Wash skin thoroughly after handling
 Avoid breathing fume/gas/mist/vapors/spray
 Wear protective gloves/ protective clothing/ eye protection/ face protection
 Use outdoors or in a well-ventilated area

Primary Route of Exposure

Eyes, skin and oral

Carcinogenicity

This product or one of its ingredients present at 0.1% or more IS listed as a carcinogen or suspect carcinogen by NTP, IARC, Prop 65 or OSHA.

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

3. Composition/ Information on Ingredients (Part A)

<u>CAS Number</u>	<u>Content %</u>	<u>Chemical Name</u>
25085-99-8	60 - 80	Diglycidyl Ether of Bisphenol A
13463-67-7	0.5 - 1.5	Titanium Dioxide
Proprietary	10 - 25	Non - Hazardous Proprietary Ingredients
68460-21-9	7 - 15	Trimethylol Ethane Triglycidyl Ether

4. First Aid Measures (Part A)

Inhalation: Move to fresh air; give oxygen if breathing is difficult. Call a physician if symptoms persist.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if symptoms persist.

Skin: Remove contaminated clothing. Wash with mild soap and water. Get medical attention if skin irritation or dermatitis persists.

Ingestion: Give plenty of water. DO NOT induce vomiting. Call a physician immediately.

Other: Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

5. Fire Fighting Measures (Part A)

Flash Point: 149 °C (>300 °F)

Flammable Limits: N/A

Extinguisher Media

Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire and Explosion Hazard

None known. Thermal Decomposition can be formed.

Special Fire Fighting Procedures

Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

6. Accidental Release Measures (Part A)

Personal Precautions:

Avoid all personal contact. In enclosed areas, cleanup personnel should wear self-contained breathing apparatus.

Environmental Precautions

Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting.

7. Handling and Storage (Part A)

Handling: Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors. Use with adequate ventilation. Use appropriate personal protection equipment (Section 8). Wash thoroughly after handling.

Storage: Store in a cool dry place away from direct sunlight. Keep from freezing. Recommended storage temperature range in between 4 °C and 35 °C (40°F and 95° F).

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

8. Exposure Control and Personal Protection (Part A)

Exposure Guidelines

Component	CAS#	OSHA PEL	TLV
Titanium Dioxide	13463-67-7	15 mg/m ³	10 mg/m ³

Engineering Measures: Use local and general exhaust ventilation to maintain airborne concentrations below TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.

Personal Protective Equipment

Respiratory Protection

None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.

Eye/Face Protection

Wear splash proof chemical goggles/ full face shield if there is a potential for splashing.

Skin / Body Protection

Wear Suitable gloves (neoprene, nitrile rubber or PVC) and protective clothing to mitigate exposure.

Other Protective Clothing or Equipment

Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

9. Physical and Chemical Properties (Part A)

Appearance:	White Paste
Evaporation Rate:	N/D
Odor:	Slight Odor
Solubility in Water:	Insoluble
Specific Gravity(g/cc):	1.36
Vapor Density(air = 1):	Non-volatile
Vapor Pressure:	N/D
VOC Content:	See section 9 of part B for VOC content
pH:	N/D
Boiling Point:	N/D

10. Stability and Reactivity (Part A)

Stability:	Stable
Thermal Decomposition:	Can yield CO, CO ₂ and organic Nitrogen compounds.
Incompatibility:	Strong acids, peroxides, and other oxidizing agents

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

Conditions to avoid:

Exposure to excessive heat and storage above 35°C (95°F) will shorten shelf life.

11. Toxicological Information (Part A)

Acute Oral Toxicity:

Not Determined

Acute Dermal Toxicity:

Not Determined

Acute Inhalation Toxicity:

Not Determined

Skin Irritation:

Irritating to skin

The product has not been tested. The statement has been derived from the properties of the individual components.

Eye Irritation:

Irritating to eyes.

The product has not been tested. The statement has been derived from the properties of the individual components.

Respiratory Irritation:

Inhalation of vapors or mists may cause irritation to the respiratory system.

Sensitization:

May cause allergic skin reaction and irritation to the respiratory system.

The product has not been tested. The statement has been derived from the properties of the individual components.

STOT – single exposure

Not Determined

STOT – Repeated Exposure

Not Determined

Carcinogenicity Classification:

Titanium Dioxide:

IARC Group 2B: Possibly carcinogenic to humans.

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

12. Ecological Information (Part A)

Fish:

Diglycidyl Ether of Bisphenol A:

Fathead minnow/LC50 (96hrs): >3.1mg/l

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

Aquatic Invertebrates:

Diglycidyl Ether of Bisphenol A:

Water Flea Daphnis/EC 50 (48hrs): > 1.4mg/l

Algae:

No Data Available

Microorganisms:

Diglycidyl Ether of Bisphenol A:

Bacteria, (Growth inhibition)/IC50 (18hrs): > 42.6mg/l

Mobility:

Considering the use of the substance, it is unlikely that significant environmental exposure in the air or water will arise.

13. Disposal Considerations (Part A)

If the material as supplied becomes a waste, dispose in accordance with federal, state and local regulations.

14. Transportation Information (Part A)

This product is not regulated as a hazardous material for transportation.

15. Regulatory Information (Part A)

HMIS Rating	
Health	1
Flammability	1
Physical Hazard	0
PPE	B



Hazard Rating: 0 = minimal, 1 = Slight, 2 = moderate, 3 = severe, 4 = extreme

Federal Regulations

CERCLA RQ

SARA Title 311/312

Not Determined

CA Prop 65

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

TSCA

Listed or Exempt

State Regulations:

State RTK



Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

NJ, MA, PA

CAS#

25085-99-8

13463-67-7

Chemical Name

Diglycidyl Ether of Bisphenol A

Titanium Dioxide

16. Other Information (Part A)

Hazard Communication: This SDS has been prepared in accordance with the federal OSHA Hazard Communication Standard

To the best of our knowledge, the information contained herein is accurate. However, Adhesives Technology Corp. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Additional information is available upon request.

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

1. Product and Company Identification

Product Name: MIRACLE BOND 1310 (Part B)

Product Use: General Purpose

Company Identification:
 ADHESIVES TECHNOLOGY CORP.
 450 East Copans Road
 Pompano Beach, FL 33064
 Contact Phone: 1.800.892.1880
 (9:00a.m. – 5:00p.m. EST)

Emergency Phone:
 Chem-Tel:
 1.800.255.3924 (24hrs)

2. Hazards Identification (Part B)

GHS Classification

Health	Physical	Environmental
Skin Corrosion Cat 1 Serious Eye Damage Cat 1 Reproductive toxicity Cat 2 Skin Sensitizer Cat 1B Carcinogen Cat 1	Not Classified	Toxic to Aquatic Life Cat-2

GHS Label:

Danger:



Corrosive to skin and eyes



Carcinogen
 Reproductive toxicity

Emergency Overview

Causes skin burns
 Causes severe eye damage
 Suspected of damaging fertility
 May cause cancer
 May be harmful if inhaled
 Wash skin thoroughly after handling
 Avoid breathing fume/gas/mist/vapors/spray
 Wear protective gloves/ protective clothing/ eye protection/ face protection
 Use outdoors or in a well-ventilated area
 Avoid contact during pregnancy/while nursing

Primary Route of Exposure

Eyes, skin and oral

Carcinogenicity

This product or one of its ingredients present at 0.1% or more IS listed as a carcinogen or suspect carcinogen by NTP, IARC, Prop 65 or OSHA.

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

3. Composition/ Information on Ingredients (Part B)

<u>CAS Number</u>	<u>Content%</u>	<u>Chemical Name</u>
140-31-8	5 - 15	N- Aminoethylpiperazine
112-24-3	1 - 5	Triethylenetetramine
107-21-1	1 - 5	Ethylene Glycol
84852-15-3	15 - 30	Nonylphenol
100-51-6	1 - 5	Benzyl Alcohol
90-72-2	3 - 7	Tris-2,4,6-(dimethylaminomethyl)phenol
Proprietary	10 - 20	Non - Hazardous Proprietary Ingredient
14808-60-7	0.5 - 1.5	Crystalline Silica

4. First Aid Measures (Part B)

Inhalation: Move to fresh air; give oxygen if breathing is difficult. Call a physician if symptoms persist.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if symptoms persist.

Skin: Remove contaminated clothing. Wash with mild soap and water. Get medical attention if skin irritation or dermatitis persists.

Ingestion: Give plenty of water. DO NOT induce vomiting. Call a physician immediately.

Other: Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

5. Fire Fighting Measures (Part B)

Flash Point: >93°C (200°F)

Flammable Limits: N/A

Extinguisher Media

Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire and Explosion Hazard

None known. Thermal Decomposition can be formed.

Special Fire Fighting Procedures

Firefighters must wear self-contained breathing apparatus and full protective clothing to prevent contact with toxic and/or irritating fumes.

6. Accidental Release Measures (Part B)

Personal Precautions:

Avoid all personal contact. In enclosed areas, cleanup personnel should wear self-contained breathing apparatus.

Environmental Precautions

Cover spills with sawdust, vermiculite, or other absorbent material to minimize spreading of the material before collecting.

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

7. Handling and Storage (Part B)

Handling: Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors. Use with adequate ventilation. Use appropriate personal protection equipment (Section 8). Wash thoroughly after handling.

Storage: Store in a cool dry place away from direct sunlight. Keep from freezing. Recommended storage temperature range in between 4 °C and 35 °C (40°F and 95° F).

8. Exposure Control and Personal Protection (Part B)

Exposure Guidelines

Component	CAS#	OSHA PEL	TLV
Ethylene Glycol	107-21-1	50ppm (Ceiling)	100 mg/ m ³ (Ceiling)
Quartz Silica Sand (Crystalline Silica)	14808-60-7	0.1 mg/m ³	0.025 mg/m ³
Benzyl Alcohol	100-51-6	50ppm (Ceiling)	100 mg/m ³

Engineering Measures: Use local and general exhaust ventilation to maintain airborne concentrations below TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it.

Personal Protective Equipment

Respiratory Protection

None normally required. Use a NIOSH approved organic vapor chemical cartridge respirator when air movement is inadequate to control vapor build-up.

Eye/Face Protection

Wear splash proof chemical goggles/ full face shield if there is a potential for splashing.

Skin / Body Protection

Wear Suitable gloves (neoprene, nitrile rubber or PVC) and protective clothing to mitigate exposure.

Other Protective Clothing or Equipment

Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

9. Physical and Chemical Properties (Part B)

Appearance:	Black Paste
Evaporation Rate:	N/A
Odor:	Slight Odor
Solubility in Water:	Insoluble
Specific Gravity(g/cc):	N/A
Vapor Density(air = 1):	Non-Volatile
Vapor Pressure:	N/A
VOC Content:	1 g/L (tested per EPA CFR 40, Part 63, Subpart PPPP, Appendix A) 47 g/L (tested per EPA CFR 40, Part 60, method 24)
pH:	N/D
Boiling Point:	N/A

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

10. Stability and Reactivity (Part B)

Stability:	Stable
Thermal Decomposition:	Can yield CO, CO ₂ and organic Nitrogen compounds.
Incompatibility:	Strong acids, peroxides, and other oxidizing agents
Conditions to avoid:	Exposure to excessive heat and storage above 35°C (95°F) will shorten shelf life.

11. Toxicological Information (Part B)

Acute Oral Toxicity:
Not Determined

Acute Dermal Toxicity:
Not Determined

Acute Inhalation Toxicity:
Not Determined

Skin Irritation:
Corrosive to skin
The product has not been tested. The statement has been derived from the properties of the individual components.

Eye Irritation:
Severe damage to eyes.
The product has not been tested. The statement has been derived from the properties of the individual components.

Respiratory Irritation:
Inhalation of vapors or mists may cause irritation to the respiratory system.

Sensitization:
May cause allergic skin reaction and irritation to the respiratory system.
The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity Classification:
Quartz Silica Sand (Crystalline Silica):
IARC Group1: Known human carcinogen based on human evidence.
NTP (National Toxicology Program) has classified Crystalline Silica as a known human carcinogen.

12. Ecological Information (Part B)

At the present state of knowledge, no negative ecological effects are expected. Past experiences have shown this material to have no harmful effect on the environment.

Safety Data Sheet
MIRACLE BOND® 1310

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

13. Disposal Considerations (Part B)

If the material as supplied becomes a waste, dispose in accordance with federal, state and local regulations.

14. Transportation Information (Part B)

DOT (US)

CARTRIDGE: Limited Quantity, LTD QTY

***BULK:** AMINES, SOLID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 3259, PG III

*Bulk packaging in quantities of 1.3 gallons (net) or less are packaged in accordance with the limited quantity exception.

IATA/ICAO

CARTRIDGE/BULK: AMINES, SOLID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 3259, PG III

IMDG

CARTRIDGE/BULK: AMINES, SOLID, CORROSIVE, N.O.S. (aminoethylpiperazine, 4-Nonylphenol, branched), Class 8, UN 3259, PG III

Marine pollutant: yes

15. Regulatory Information (Part B)

HMIS Rating	
Health	*3
Flammability	1
Physical Hazard	0
PPE	B



Hazard Rating: 0 = minimal, 1 = Slight, 2 = moderate, 3 = severe, 4 = extreme

Federal Regulations

CERCLA RQ
5000 lbs

SARA Title 311/312

CA Prop 65

TSCA

CAS
107-21-1

Chronic Health Hazard

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Listed

Chemical Name
Ethylene Glycol

**Safety Data Sheet
MIRACLE BOND[®] 1310**

Created On: 02/07/2014

Revision Date: 04/06/16

Version: 6.0

State Regulations:**State RTK
NJ, MA, PA****CAS#
107-21-1
14808-60-7
140-31-8
14807-96-6****Chemical Name
Ethylene Glycol
Quartz Silica Sand (Crystalline Silica)
n-aminoethylpiperazine
Hydrous Magnesium silicate****16. Other Information**

Hazard Communication: This SDS has been prepared in accordance with the federal OSHA Hazard Communication Standard

To the best of our knowledge, the information contained herein is accurate. However, Adhesives Technology Corp. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Additional information is available upon request.