

Manufacturer:

ÅngströmBond®

Product Name:

ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5g)

Manufacturer Part Number:

AB9590-2.5G

Click here for more details on the AngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5q)

AngströmBond*

Safety Data Sheet

ISO 9001 CERTIFIED ISO 14001 CERTIFIED

REVISION DATE: 10/25/24 REVISION: 3.0

1. PRODUCT & COMPANY IDENTIFICATION:

1.1 Product Identifiers:

Product (Trade) Name: AB9590-2.5G Part B

Brand ÅngströmBond® CAS ÅngströmBond®

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

Identified uses Epoxy curing agent

1.3 Details of the supplier of the safety data sheet:

Manufacturer Fiber Optic Center, Inc. Address 23 Center Street

New Bedford, MA 02740-6322

Telephone 1-508-992-6464 Fax 1-508-991-8876

1.4 Emergency Telephone Number

Chemtrec Emergency (800)-424-9300

Call this number in the event of an accident resulting in a spill, leak or fire.

Call this number in the event of exposure to the chemicals.

2. HAZARD IDENTIFICATION:

2.1 Classification of substance or mixture:

Classification according to GHS formatting

DANGER!

Acute Toxicity, OralCategory 4(H302)Skin CorrosionCategory 1B(H314)Skin SensitizationCategory 1(H317)Serious Eye DamageCategory 1(H318)

2.2 Label Elements:



Hazard statement(s)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

Precautionary Statement(s)

Prevention:

P261 Avoid breathing dust fume/gas/mist/vapor/spray.

P264 Wash thoroughly after handling.

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

Response:

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.





Manufacturer:

ÅngströmBond®

Product Name:

ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5g)

Manufacturer Part Number:

AB9590-2.5G

➤ Click here for more details on the ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5q)

P303+P361+P353 IF ON SKIN (or hair): remove/take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: get medical advice/attention.

P363 Wash contaminated clothing before reuse.

Storage: None known. Disposal: P501

P333+P313

Dispose of contents to appropriate local waste disposal center.

2.3 Other hazards:

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

MATERIAL	CAS No.	%	
Benzyl alcohol	100-51-6	< 40	
Trimethylhexamethylenediamine	25620 - 58-0	< 10	
Modified cycloaliphatic amine	Proprietary	> 15	

4. FIRST AID MEASURES:

4.1 Description of first aid measures:

General advice: Seek medical advice.

In case of eye contact: Immediately wash eyes with running water for 15 minutes. Get immediate medical

In case of skin contact: Remove contaminated clothing/shoes and wash affected areas with water followed by washing with soap and water. If irritation occurs, get medical attention. Launder contaminated clothing before

If swallowed: DO NOT INDUCE VOMITING. Dilute with water or milk and call a physician immediately. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

If inhaled: Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

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

Target organs: Eyes, skin, respiratory system, liver, kidney, pancreas, spleen, central nervous system

4.3 Indication of any medical attention and special treatment needed:

Adverse eye effects such as conjunctivitis or corneal damage; eye disease. Can cause severe burns, blindness, irritation.

5. FIRE-FIGHTING MEASURES:

5.1 Extinguishing Media

Suitable extinguishing media:

Use water fog, alcohol foam, CO₂ or dry chemical extinguishing media.

5.2 Special hazards arising from the substance or mixture:

Carbon oxides, toxic nitrogen oxide gases.

5.3 Advice for firefighters:

Material will not burn unless preheated. Firefighters should not enter confined space without full bunker gear (helmet with face shield, bunkercoats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus.

5.4 Further information:

No data available on product itself.

6. ACCIDENTAL RELEASE MEASURES:

6.1 Personal precautions, protective equipment, and emergency procedures:

Extinguish all sources of ignition. Wear appropriate clothing, gloves, goggles or glasses. Provide adequate ventilation.

6.2 Environmental Precautions:

Do not discharge into any sewage system or waterway.



Manufacturer:

ÅngströmBond®

Product Name:

ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5g)

Manufacturer Part Number:

AB9590-2.5G

Click here for more details on the AngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5q)

6.3 Methods and materials for containment and cleanup:

Absorb with earth, sand, or other inert material and place in suitable containers for disposal.

6.4 Reference to other sections:

For disposal see section 13.

7. HANDLING & STORAGE:

7.1 Precautions for safe handling:

Observe normal standards of industrial hygiene for handling chemicals. Avoid contact with skin and eyes. Use extreme caution when spraying or aerosolizing this product.

7.2 Conditions for safe storage, including incompatibilities:

Store in a cool, dry, well ventilated area. Keep containers tightly closed and away from heat, direct sunlight and ignition sources.

7.3 Specific end uses:

Including but not limited to: curing agent for epoxy systems.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION:

8.1 Control Parameters:

Components with control parameters:

MATERIALS LIMIT VALUES
Benzyl alcohol TWA: 10 ppm

Exposure controls

Appropriate engineering controls

Mechanically exhaust vapors at points of application. Maintain airborne contaminant levels of chemicals below their recommended TLV's or PEL's.

Personal protective equipment

Skin Protection

Avoid prolonged or repeated contact with skin. Wear impervious gloves such as nitrile, latex, or polychloroprene and other clothing to prevent contact.

Respiratory Protection

For confined areas or areas with poor ventilation, use an approved cartridge type, organic vapor respirator. Use extreme caution when spraying or aerosolizing this product.

Eye Protection

Chemical goggles or safety glasses with side shields.

Protective Clothing

Impervious gloves, coveralls, apron, boots as necessary to prevent skin contact.

9. PHYSICAL & CHEMICAL PROPERTIES:

9.1 Information on basic physical and chemical properties:

a) Appearance:

Form:
Color:
Color:
Colorless
b) Odor:
Ammonia-like odor
c) Odor threshold:
Not determined

d) pH:
e) Melting/freezing point:
f) Boiling point:
g) Flash point:
h) Evaporation rate:
i) Flammability (solid, gas):
j) Upper/lower flammability limits (UEL/LEL):

Alkaline
Not determined
Not determined
Upper: Not determined
Lower: Not determined

k) Vapor pressure @ 20°C:

I) Vapor density:

m) Specific gravity (water=1):

n) Solubility in water:

o) Partition coefficient (n-octanol/water):

Not determined Heavier than air 0.99 Not determined

Not determined Not determined





Manufacturer:

ÅngströmBond®

Product Name:

ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5g)

Manufacturer Part Number:

AB9590-2.5G

Click here for more details on the ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5g)

Not determined

Not determined

Not determined

Not determined

Not determined

Not determined

p) Auto-ignition temperature:

q) Decomposition temperature:

r) Viscosity (25°C):

s) Explosive properties:

t) Oxidizing properties:

u) Volatiles (by % wt.):

9.2 Other safety information:

No data available on product itself.

10. STABILITY & REACTIVITY:

10.1 Reactivity:

No data available on product itself.

10.2 Chemical Stability:

Stable under normal conditions.

10.3 Possibility of hazardous reactions:

Can react vigorously with strong oxidizing agents, strong Lewis acids or mineral acids, and strong mineral and organic bases.

10.4 Conditions to avoid:

Storage in open containers, sources of ignition, high temperatures and direct sunlight.

10.5 Incompatible materials:

Strong oxidizing agents, strong Lewis acids or mineral acids, and strong mineral and organic bases. Avoid contact with sodium hypochlorite.

10.6 Hazardous decomposition products:

Carbon monoxide, aldehydes, acids, and other organic substances can be formed during combustion, thermal, or oxidative decomposition. Reaction with some curing agents may produce considerable heat.

11. TOXICOLOGICAL INFORMATION:

Acute Toxicity

No data available on product itself.

ATE, mix

LD50, oral = > 1,000 mg/kg LD50, dermal = > 2,800 mg/kg

Skin Corrosion/Irritation

May cause severe skin irritation or corrosion (based on components).

Serious Eye Damage/Irritation

May cause serious eye damage (based on components).

Sensitization

May cause skin sensitization (based on components).

Specific Target Organ Toxicity – Single Exposure (STOT – SE)

No data available on product itself.

Specific Target Organ Toxicity – Repeated Exposure (STOT – RE)

No data available on product itself.

Carcinogenicity

No data available on product itself.

ACGIH Classification: Not classified.

IARC Classification: Not classified.

NTP Classification: Not classified.

OSHA Classification: Not classified.

Teratogenicity, Reproductive Toxicity, and Mutagenicity





Manufacturer:

ÅngströmBond®

Product Name:

ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5g)

Manufacturer Part Number:

AB9590-2.5G

➤ Click here for more details on the ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5q)

No data available on product itself.

Aspiration Hazard

No data available on product itself.

12. ECOLOGICAL INFORMATION:

12.1 Toxicity:

No data available on product itself.

12.2 Persistence and degradability:

No data available on product itself.

12.3 Bioaccumulative potential:

No data available on product itself.

12.4 Mobility in soil:

No data available on product itself.

12.5 Results of PBT and vPvB assessment:

No data available on product itself.

12.6 Other information/effects:

Do not allow discharge into drains and waterways. Avoid ground contamination.

13. DISPOSAL RECOMMENDATIONS:

13.1 Waste treatment methods:

Place in an appropriate disposal facility in compliance with local regulations.

14. TRANSPORT INFORMATION:

14.1 UN number

2735

14.2 UN proper shipping name

Amines, liquid, corrosive, n.o.s. (cycloaliphatic amines) DOT: ADR/RID: Amines, liquid, corrosive, n.o.s. (cycloaliphatic amines) IMG: Amines, liquid, corrosive, n.o.s. (cycloaliphatic amines) IATA: Amines, liquid, corrosive, n.o.s. (cycloaliphatic amines)

14.3 Transport hazardous class(es)

14.4 Packaging group

14.5 Environmental hazards

14.6 Special precautions for user

None

15. REGULATORY INFORMATION:

This safety datasheet complies with GHS formatting.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **US Federal Regulations**

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and of the Code of Federal Regulations, Part 372.

Component CAS Weight %

None.

SARA 311/312 Hazardous Categorization

Acute Health Hazard Yes **Chronic Health Hazard** No Fire Hazard Nο Sudden Release of Pressure Hazard No **Reactive Hazard** No



Manufacturer:

ÅngströmBond®

Product Name:

ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5g)

Manufacturer Part Number:

AB9590-2.5G

Click here for more details on the ÅngströmBond® AB9590 Thermally Conductive Black Epoxy, Room Temperature Cure (2.5q)

State Regulations

California Proposition 65

This product contains NO chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

TSCA (Toxic Substance Control Act)

All ingredients listed or exempt.

15.2 Chemical Safety Assessment

No data available on product itself.

16. OTHER INFORMATION:

HMIS Rating:

H - 3, F - 1, R - 0

To the best of our knowledge, the information contained herein is accurate and meets all State and Federal guidelines. However, Fiber Optic Center, Inc. does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. 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 which exist. Final determination of the suitability of any material is the sole responsibility of the user.

SDS prepared 4th of April 2022. Updated formatting, hazard information, sections 11 and 12.

