

Manufacturer:

ÅngströmBond®

Product Name:

ÅngströmBond AB9037 Plastic Bonding UV Cure Adhesive (3CC)

Manufacturer Part Number:

AB9037-3CC

Click here for more details on the ÅngströmBond AB9037 Plastic Bonding UV Cure Adhesive (3CC)

Adhesives

AB 9037 from AngstromBond

Advanced Polymers for High Tech Applications

SDS # AB 9037

Safety Data Sheet

according to HazCom 2012

SDS #: AB 9037 Issue Date: 9/8/2021

Revision Date: N/A

Section 1: Identification

GHS Product Identifier/Name

ÅngstromBond® AB 9037

Other means of identification

Product Code Other means of identification AB 9037 Not available

Recommended use of the chemical and restrictions on use

Details of the supplier of the Safety Data Sheet

Supplier Address

Fiber Optic Center, Inc. 23 Centre Street

New Bedford, MA 02740-6322 USA

Tel: 1-508-992-6464 Fax: 1-508-991-8876

Emergency Telephone

CHEMTREC 1-800-424-9300 (24 hrs)

For product emergencies involving spill, leak, fire exposure or accident please contact CHEMTREC.

For all other inquires please contact Fiber Optic Center, Inc.TM at 1-800-473-4237

Section 2: Hazard(s) Identification

Emergency Overview:

Odor- Mild

Color- Light yellow Appearance- Translucent

Classification of the Substance or mixture:

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation

Category 2 Category 1

Serious eye damage/eye irritation

Category 1A

Skin sensitization Acute toxicity – Inhalation (Dust/Mists) Specific target organ toxicity (single exposure)

Category 4 Category 3

Target Organ Effects

Issue Date: 9/8/2021

Respiratory system

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GHS Label Elements:

This product is classified and labeled according to the Globally Harmonized System (GHS). **Hazard Pictograms:**





Signal word:

DANGER

Hazard Statements:

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H332 – Harmful if inhaled

H335 - May cause respiratory irritation

<u>Precautionary statements:</u> Do not handle until all safety precautions have been read and understood

Prevention:

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Use only outdoors or in a well-ventilated area

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

Response:

IF ON SKIN: Wash with plenty of soap and water, take off contaminated clothing and wash before reuse, If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Information:

Testing for acute and chronic Aquatic effects determined no environmental classification is required.

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Section 3: Composition / Information on Ingredients

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

Substances:

MATERIAL	CAS No.	Weight %	Trade Secret	Classification
				(Reg. 1272/2008)
Isobornyl Acrylate	5888-33-5	10-24	*	STOT SE 3 (H335)
				Skin Irrit. 2 (H315)
				Eye Irrit. 2A (H319)
				Skin Sens 1 (H317)
				Aquatic Chronic 2 (H411)
N, N-Dimethylacrylamide	2680-03-7	10-24	*	Flam. Liq. 4 (H227)
				Acute Tox. 3 (H301)
				Acute Tox. 3 (H311)
				Acute Tox. 3 (H331)
				Eye Damage 1 (H318)
Acrylic acid	79-10-7	1-3	*	Flam. Liq. 3 (H226)
				Acute Tox. 4 (H302)
				STOT SE 3 (H335)
				Acute Tox. 4 (H332)
				Skin Corr. 1 (H314)
10.01.51			*	Aquatic Acute 1 (H400)
Visible Photoinitiator	Proprietary	<1	*	Skin Sens 1 (H317)
B1			*	Aquatic Chronic 4 (H413)
Photoinitiator	Proprietary	1-3	*	Skin Irrit 2 (H315)
				Eye Irrit. 2A (H319)
			*	STOT SE 3 (H335)
Acrylate Monomer	Proprietary	4-9	*	Acute Tox. 4 (H332)
				Skin Irrit. 2 (H315)
				Eye Irrit. 2B (H320)
0" 0 1" 1			*	Skin Sens 1 (H317)
Silane Coupling Agent	Proprietary	1-3		Skin Sens 1 (H317)
Tert-Butyl Perbenzoate	614-45-9	<1	*	Org Perox C (H242)
				Acute Tox 4 (H332)
				Skin Irrit 2 (H315)
				Skin Sens 1 (H317)
				Aquatic Acute 1 (H400)
			1	Aquatic Chronic 3 (H412)

Remaining ingredients are not considered hazardous in accordance with the Globally Harmonized System (GHS) *The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: First-Aid Measures

Description of first aid measures:

General advice

IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

Eye contact

Flush eyes with water for at least 15 minutes. Get medical attention if eye irritation develops or persists. **Skin Contact**

Wash off immediately with plenty of water, get medical attention if irritation develops and persists.

Inhalation
Remove to fresh air, if symptoms persist, call a physician.

Ingestion

If swallowed, Rinse mouth, Get medical attention.

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Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Most important symptoms and effects, both acute and delayed

Main Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

Section 5: Fire-Fighting Measures

Extinguishing Media:

Suitable extinguishing media

Use CO2, dry chemical, or foam.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

Hazardous combustion products

Hazardous decomposition products due to incomplete combustion.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Personal precautions

Ensure adequate ventilation, Wear protective gloves/clothing and eye/face protection.

Environmental precautions:

Environmental precautions

Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses, See Section 12 for additional Ecological Information, Local authorities should be advised if significant spillages cannot be contained.

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Other Information

See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up:

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Section 7: Handling and Storage

Precautions for safe handling:

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice, ensure adequate ventilation, protect from light.

Conditions for safe storage, including any incompatibilities:

Technical measures and storage conditions

Keep container tightly closed in a dry and well-ventilated place, protect from light.

Incompatible products

Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers, Thiosulfates.

Section 8: Exposure Controls / Personal Protection

Control Parameters:

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acrylic Acid	TWA: 2 ppm S*	(vacated) TWA: 10 ppm	TWA: 2 ppm
79-10-7 (1-3%)		(vacated) TWA: 30 mg/m ₃ S*	TWA: 6 mg/m ₃

ACGIH (American Conference of Governmental Industrial Hygienists)

TLV - Threshold Limit Value

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEL - Permissible Exposure Limits

NIOSH IDLH

Immediately Dangerous to Life or Health

Appropriate engineering controls:

Engineering Measures

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses with side-shields, if splashes are likely to occur, wear: Goggles.

Skin and body protection

Wear protective gloves and protective clothing.

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Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required, do not breathe vapors, mist or gas.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice, when using do not eat, drink or smoke, Wear suitable gloves and eye/face protection, Wash hands before breaks and at the end of workday, Regular cleaning of equipment, work area and clothing is recommended.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties:

Physical state Liquid (gel) Appearance Translucent Color Light Yellow Odor

Mild

Odor threshold No information available

Property Values Melting point / freezing point

Boiling point / boiling range Flash point 101 °C / 213 °F Evaporation rate

Flammability (solid, gas) Flammability Limit in Air Upper flammability limit Lower flammability limit -

Vapor pressure Vapor density

Specific Gravity Water Solubility Practically insoluble Solubility in other solvents

Partition coefficient: n-octanol/water Autoignition temperature Decomposition temperature

50,000 cP Dynamic viscosity

Kinematic viscosity **Explosive properties** Oxidizing properties

Other Information:

Softening point No information available VOC Content (%) No information available Molecular Weight No information available Density No information available Bulk density No information available Remarks / • Method

No information available No information available No information available

No information available No information available

No information available No information available No information available

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Section 10: Stability and Reactivity

Reactivity:

No data available

Chemical Stability:

Stable under normal conditions.

Possibility of hazardous reactions:

None under normal processing.

Conditions to avoid:

Protect from light, heat, flames and sparks.

Incompatible materials:

Amines, Strong oxidizing agents, Strong acids, Strong bases, Oxygen scavengers.

Hazardous decomposition products:

No decomposition if stored and applied as directed.

Section 11: Toxicological Information

Information on toxicological effects:

Acute toxicity

Information on likely routes of exposure

Inhalation There is no data for this product Eye contact There is no data for this product Skin Contact There is no data for this product Ingestion There is no data for this product

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available
Mutagenic effects No information available.
Reproductive toxicity No information available.
Carcinogenicity Contains no ingredients above reportable quantities listed as a carcinogen.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organ Effects Respiratory system.
Aspiration hazard No information available
Other adverse effects No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 2577 mg/kg ATEmix (dermal) 4812 mg/kg ATEmix (inhalation-dust/mist) 2.8 mg/l ATEmix (inhalation-vapor) 550 mg/l

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> Learn More



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Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isobornyl Acrylate	= 4890 mg/kg (Rat)	> 5 g/kg (Rabbit)	
N,N-Dimethylacrylamide	252 mg/kg (Rat)	907mg/kg (Rabbit)	776 ppm (Rat) 1 h
Acrylate Monomer		LD50 > 1,000 mg/kg (Rabbit)	
Photoinitiator	5000 mg/kg (Rat)	>1160 mg/kg (Rat)	10.6 mg/L (Rat) 4 h
Acrylic Acid	= 193 mg/kg (Rat) = 33500 µg/kg (Rat)	= 280 µL/kg (Rabbit) = 295 mg/kg (Rabbit)	= 5300 mg/m ₃ (Rat) 2 h
Silane Coupling Agent	>5000 mg/kg (Rat)		
Tert-Butyl Perbenzoate	= 4838 mg/kg (Rat)	= 3817 mg/kg (Rabbit)	
Visible photoinitiator	>2000 mg/kg (Rat)	>2000 mg/kg (Rat)	

Section 12: Ecological Information

Ecotoxicity:

 $0\ \%$ of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Acute aquatic toxicity

Product Information

Testing for acute and chronic aquatic effects determined no environmental classification is required.

Component Information

Chemical Name	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates	Toxicity to algae
Isobornyl Acrylate	LC50 = 1.8 mg/L 96 h	EC 50 = 1.1 mg/L 48 h	ErC 50 = 2.7 mg/L 96 h
	(Danio rerio)	(Daphnia magna)	(Pseudokirchneriella subcapitata)
N,N-Dimethylacrylamide	LC50 > 120 mg/L 96 h (Oncorhynchus mykiss)	EC50 > 120 mg/l 48 h (Daphnia magna)	
Acrylic Acid	LC50 = 222 mg/L 96 h (Brachydanio rerio)	EC50 = 95 mg/L 48 h	EC50 0.04 mg/L 72 h (Desmodesmus subspicatus)
Silane Coupling Agent	LC50 > 1024,00 mg/l 96 h	EC50 > 876,00 mg/l 48 h	EC50 > 536,00 mg/l 72 h
	(Brachydanio rerio)	(Daphnia magna)	(Scenedesmus subspicatus)
Tert-Butyl Perbenzoate	LC50 1.6 mg/l 96 h	EC50 11 mg/L 48 h	EC50 1.3 mg/l 72 h
	(Brachydanio rerio)	(Daphnia magna)	(Pseudokirchneriella subcapitata)
Visible photoinitiator	LC50 > 0.09 mg/l 96 h	EC50 > 1.175 mg/l 48 h	EC50 > 0.26 mg/l 72 h
	(Brachydanio rerio)	(Daphnia magna)	(Scenedesmus sp.)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical Name	log Pow
Isobornyl Acrylate	4.52
Photoinitiator	2.5
Acrylic Acid	0.46
Tert-Butyl Perbenzoate	3

Mobility in soil

No product level data available.

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Contact the professionals at Fiber Optic Center for a quote or to get more details.



23 Centre Street • New Bedford, MA 02740 USA • <u>focenter.com</u> 508-992-6464 | (800) 473-4237 • <u>sales@focenter.com</u>



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Section 13: Disposal Considerations

Waste treatment methods:

Dispose of waste in compliance with local and national regulations

Contaminated packaging

Dispose of in accordance with local regulations.

Section 14: Transport Information

DOT Not regulated ICAO/IATA Not regulated IMDG/IMO Not regulated

Section 15: Regulatory Information

International Inventories:

TSCA Complies AICS Not listed DSL/NDSL Not listed **EINECS/ELINCS** Complies **ENCS** Not listed

IECSC Simplified Notification **KECL** Low Volume Exemption (LVE)

NZIoC Not listed **PICCS** Not listed **TCSI** Complies

Legend: TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

AICS - Australian Inventory of Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical

Substances

ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances

NZIoC - New Zealand Inventory of Chemicals PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substance Inventory

US Federal Regulations:

OSHA Regulatory Status

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

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 Title 40 of the Code of Federal Regulations, Part 372:

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Chemical Name	SARA 313 - Threshold Values %
Acrylic Monomer	1.0
Acrylic Acid	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or as extremely hazardous substances under the Superfund Amendments and Reauthorization Act (SARA) (40CFR 355).

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acrylic Acid	5000 lb		RQ 5000 lb final RQ
			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Acrylate Monomer	X		X
Acrylic Acid	X	X	X
Tert-Butyl Perbenzoate	Χ	X	X
Tert-Butyl Hydroneroxide	X	X	X

Section 16: Other Information

SDS Creation Date: 9/8/2017 SDS Revision Date: N/A Reason for Revision:

For more information: phone: 1-800-473-4237, fax: 1-508-991-8876

Prepared by Fiber Optic Center, Inc.

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Fiber Optic Center", Inc., 23 Centre Street, New Bedford, MA, 02740-6322, USA
Toll Free: (800) IS-FIBER or (800) 473-4237 • Phone: (508) 992-6464 • Fax: (508) 991-8876 • Website: www.focenter.com
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