

Material Safety Data Sheet



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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<i>Product name</i> <i>Product number</i>	ARON ALPHA TYPE 212Z AA-538, AA-593, AA-783	<i>Emergency Telephone Number</i>
<i>Manufacture's Name</i>	Krazy Glue Co., Div. of Toagosei America Inc.	CHEMTREC (800) 424-9300
<i>Address</i>	1450 West Main Street West Jefferson, OH 43162	<i>Telephone Number for Information</i>
		(614) 879-9411

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Emergency Overview

A colorless liquid with an irritating odor.

Caution!
Combustible

Warning!
May be harmful if inhaled.
Bonds skin instantly.
Causes eye irritation.

2.2 OSHA Regulatory Status

This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

2.3 Potential Health Effects

Route(s) of Entry :

Inhalation?
Yes

Skin?
No

Ingestion?
No

Signs and Symptoms of Exposure

Mild irritation of eyes, nose and throat; headache

Immediate Hazards

Ingestion:	No hazards known.
Inhalation:	May be harmful if inhaled. Liquid or vapor may cause irritation of nose, throat and lungs
Skin:	Bonds skin instantly. Causes irritation.
Eyes:	Bonds eyelids instantly. Causes irritation.

Health Hazards (Acute and Chronic)

Skin: Rapid polymerization will occur on skin with heat. If a quantity is large, skin burn may happen.

Inhalation: High vapor concentration can induce nasal mucous, headaches, and giddiness

Eye: Irritation and lachrymation will occur slightly

Medical Conditions Generally Aggravated by Exposure

None

Note: None of the components present in this product at concentrations equal to or greater than 0.1% have been listed by NTP, classified by IARC, nor regulated by OSHA as a carcinogen.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

	Components (Specific Chemical Identity; Common Name(s) and CAS number)	%(Optional)
1	Ethyl 2-Cyanoacrylate (CAS NO. 7085-85-0)	95-99
2	Polymethylmetacrylate (CAS NO. 9011-14-7)	1-5
3	1,4-Benzenediol Hydroquinone, 1,4-Dihydroxybenzene (CAS NO. 123-31-9)	<0.1

SECTION 4 - FIRST AID MEASURES

INGESTION:

Do not induce vomiting.
If accidentally swallowed, dilute by drinking large quantities of water.
Immediately contact poison control center or hospital emergency room for any other additional treatment directions.

INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician.

SKIN:

Wash material off the skin with plenty of water.
If skin bonding occurs, soak in nail polish remover or acetone and carefully peel or roll skin apart (do not pull).

EYES:

If eye contact occurs, hold eyelid open and rinse thoroughly but gently with only water for 15 minutes and GET MEDICAL ATTENTION. Do not use any solvents to flush the eye and its surroundings. Liquid glue will sting eye temporarily. Solidified glue may irritate eye like a grain of sand and should be treated by an eye doctor.

SECTION 5 -FIRE FIGHTING MEASURES

5.1 Flammable Properties

See section 9 for flammable properties.

5.2 Extinguishing Media

5.2.1 Suitable extinguishing media

Use dry chemical or carbon dioxide (CO₂) to extinguish fire.

5.2.2 Unsuitable extinguishing media

Do not use water spray to extinguish fire.

5.3 Protection of firefighters

5.3.1 Specific hazards arising from the chemical

Unusual Fire and Explosion Hazards

None known

5.3.2 Protective equipment and precautions for firefighters

Self-contained breathing apparatus with face piece and protective clothing if involved in a fire of other materials

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Avoid breathing vapors. Ventilate area.

6.2 Environmental precautions

Prevent entry into natural bodies of water.

6.3 Methods for containment

Material may be taken up on sand or clay absorbent.
For small quantities : Soak up with absorbent material and remove to a chemical disposal area.
For large quantities : Wipe and soak up material with an absorbent material.

6.4 Methods for clean-up

Eliminate all sources of ignition.
Immerse absorbent in a pail of water or suitable, close container and dispose of as hazardous waste.

SECTION 7 -HANDLING AND STORAGE

7.1 Handling

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing. Wash thoroughly after handling.

7.2 Storage

Keep away from amines. Store in a cool, dry area away from sun and heat.
Keep containers tightly closed. Exposure to small amounts of moisture, even in air, causes polymerization and renders the product unusable. Keep away from heat, sparks, flame and other ignition sources.

SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS

8.1 Exposure guidelines

Component	OSHA TWA	ACGIH TWA	Units
Ethyl 2-Cyanoacrylate	N. E.	1	mg/m ³
Polymethylmetacrylate	N. E.	N. E.	-
Hydroquinone	2	2	mg/m ³

N. E. = Not established

8.2 Engineering controls

The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate.

8.3 Personal protection equipment (PPE)

8.3.1 Eye/face protection

Wear safety goggles when contact is likely.

8.3.2 Skin protection

Wear impervious gloves as required to prevent skin contact.

8.3.3 Respiratory protection

Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection.

8.3.4 General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Avoid breathing vapor. Avoid contact with skin and eyes.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	_____	Clear, colorless liquid
Odor	_____	Irritating
Odor Threshold	_____	N/A
Physical State	_____	Liquid
pH	_____	N/A
Freezing Point	_____	-30°C

Boiling Point (@ 532 Pa) _____ 62°C/144°F
Flash Point (Closed Cup) _____ 83°C/181°F
Evaporation Rate (Butyl acetate = 1) _____ N/A
Lower explosion limit _____ N/A
Upper explosion limit _____ N/A
Vapor Pressure (mmHg @ 20°C) _____ 0.13
(Pa @ 20°C) _____ 17.33
Vapor Density (AIR = 1) _____ >1
Specific Gravity (H2O = 1 @ 25°C) _____ 1.05
Solubility in Water _____ Insoluble, water causes rapid polymerization
VOC content (g/L) _____ 0 (SCAQMD Method 316B)
Partition coefficient _____ N/A
Auto-ignition temperature _____ N/A
Decomposition temperature _____ N/A
Viscosity _____ 100 cps

SECTION 10 - STABILITY AND REACTIVITY

10.1 Chemical stability

Unstable: **X**
Stable:

10.2 Conditions to avoid

High humidity, high temperature or ultraviolet ray.

10.3 Incompatible materials (Materials to Avoid)

Water, alcohol and basic compounds such as amines.

10.4 Hazardous decomposition products

CO, CO₂, nitrogen oxides

10.5 Possibility of hazardous reactions

May Occur: **X**
Not Occur:

Avoid contact with basic compounds such as amines.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity

No data available

Irritation and corrosion

No data available

Sensitization

No data available

SECTION 12 - ECOLOGICAL INFORMATION

No data available.

SECTION 13 - DISPOSAL INFORMATION

Disposal should be in accordance with applicable local, regional and national laws and regulations. Local regulations may be more stringent than regional or national requirements.

May contain explosive vapors. DO NOT cut, puncture or weld on or nearby.

SECTION 14 – TRANSPORT INFORMATION

14.1 Basic shipping description

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

US DOT

Not dangerous goods

IATA

Not dangerous goods

14.2 Additional Information**Canadian TDG**

WHMIS Classification: this product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

SECTION 15 - REGULATORY INFORMATION

15.1 U.S. Federal Regulations

SARA Title III: Section 311/312

Fire hazard
Immediate health hazard

SARA Title III Section 313 and 40 CFR Part 372

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

None required per SARA TITLE III SECTION 313.

TSCA Section 8(b) Inventory

All reportable chemical substances are listed on the TSCA Inventory.
We rely on certifications of compliance from our suppliers for chemical substances not manufactured by us.

15.2 Canadian Regulations

Workplace Hazardous Materials Information System (WHMIS)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

CLASS D, DIV 1B, 2B
CLASS B, DIV 3

Canadian Environmental Protection Act (CEPA)

All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.

National Pollutant Release Inventory (NPRI)

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act (CEPA) subsection 16(1), National Pollutant Release Inventory.

None

SECTION 16- OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate. However, neither Toagosei America Ltd. nor any of its subsidiaries 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 which exist.

HMIS Rating Health **2**
 Flammability **2**
 Physical Hazard **1**

0-minimal, 1-slight, 2-moderate, 3-serious, 4-severe