SAFETY DATA SHEETS

This SDS packet was issued with item:

073157609

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

073157526 073157617

Material Safety Data Sheet

KRAZY GLUE CO.

Revised: 1/31/13
Replaces:12/14/09

Date of printed: 01/31/13

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name	**ARON ALPHA TYPE 203**	*Emergency Telephone Number*
Product number	AA-472, AA-488, AA-502, AA-589	**CHEMTREC (800) 424-9300**
Manufacture's Name	**Krazy Glue Co., Div. of Toagosei America Inc.**	*Telephone Number for Information*
Address	**1450 West Main Street West Jefferson, OH 43162**	**(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?	Skin?	Ingestion?
Yes	No	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 lachyrymation 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)	%
1	Ethyl 2-Cyanoacrylate (CAS NO. 7085-85-0)	>95
2	Polymethylmetacrylate (CAS NO. 9011-14-7)	<5

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 (CO_2) 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 form 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

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

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 e
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/-22°F
Boiling Point (@ 532 Pa)	62°C/144°F
Flash Point (Closed Cup)	83°C/181°F
Evaporation Rate (Butyl acetate = 1)	N/A
Flammability	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	1500 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, CO_2, 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 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 assume any liability whatsoever for the accuracy or completeness of th 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

Section 1: Identification

Product Identifiers

Product name ***Aron Alpha Type 203***
Product number ***AA-472, 488, 502, 502N, 589***

Recommended use of & restrictions on use
Adhesive

Emergency telephone number

CHEMTREC (800) 424-9300

Manufacturer's Information

Manufacturer's Name

Krazy Glue Co.,
Div. of Toagosei America Inc.
1450 West Main Street
West Jefferson, OH 43162

Telephone: (614) 879-9411

Section 2 – Hazard Identification

Classification of the substance or mixture

Classification according to 1910.1200:

Flammable Liquids	**Category 4**
Serious Eye Damage/ Eye Irritation	**Category 2A**
Skin Sensitization	**Category 1A**
Specific Toxic Organ Toxicity-Single Exposure (STOT-SE)	**Category 3, Respiratory Tract Irritation**

Label Elements

Pictograms

Exclamation mark

Signal word Warning

Hazard statements

Combustible liquid
Causes serious eye irritation
May cause an allergic skin reaction or respiratory irritation

Precautionary statements

Prevention
Avoid breathing vapors.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.

Keep away from flames and hot surfaces. – No smoking.
Wear protective gloves and eye protection.
Contaminated work clothing must not be allowed out of the workplace.

Response
In case of fire: Use dry chemical or carbon dioxide (CO_2) to extinguish.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If skin irritation or rash occurs: Get medical advice/attention.
Remove contaminated clothing and wash before reuse.
Call a poison control center of doctor if you feel unwell.

Storage
Store in a cool, well-ventilated place and keep container tightly closed.
Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards Not Otherwise Classified

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

Section 3 – Composition/Information on Ingredients

Chemical Name	Common Name/Synonyms	CAS Number	Concentration %
Ethyl-2-Cyanoacrylate		7085-85-0	>90
Fumed Silica		68611-44-9	4-8

*Non hazardous ingredients are not listed and make up the balance of the product.

Section 4 – First-Aid Measures

Description of first aid measures

Ingestion: Ensure airways are not obstructed. The product will polymerize upon contact with the mouth and be almost impossible to swallow. Saliva will slowly separate the product from the mouth. Do not induct vomiting. Immediately contact poison control center or hospital emergency room.

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, acetone or warm water and carefully peel or roll the 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 like a grain of sand and should be treated by an eye doctor.

Most important symptoms/effects, acute and delayed

The most important symptoms or effects are described in Section 2 and 11.

Indication of immediate medical attention & special treatment needed. - No data available.

Section 5 – Fire-Fighting Measures

Extinguishing media

Suitable – Use dry chemical, water spray or carbon dioxide (CO_2) to extinguish fire.

Unsuitable – No data available.

Special hazards arising from the chemical – Carbon oxides, nitrogen oxides

Special protective equipment and precautions for fire-fighters – Self-contained breathing apparatus with face piece and protective clothing if involved in a fire of other materials.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personal. Avoid breathing vapors. Ventilate area. Eliminate all sources of ignition.

Environmental Precautions

Prevent entry into natural bodies of water.

Methods and materials for containment and clean up

Containment – Material may be taken up on sand or clay absorbent. Wipe and soak up with an absorbent material and remove to a chemical disposal area.

Clean-up – Eliminate all sources of ignition. Keep absorbent in a suitable, closed container and dispose of according to local regulations.

Section 7 – Handling and Storage

Precautions for safe handling

Bonds skin instantly. Keep away from skin and eyes. Avoid breathing vapors. Keep away from ignition sources. Prevent build up of electrostatic charge. Wash thoroughly after handling.

Conditions for safe storage

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

Incompatibilities

Keep away from amines.

Section 8 – Exposure Controls/Personal Protection

Exposure guidelines

Component	NIOSH		ACGIH	OSHA	Units
	TWA	STEL	TWA	PEL	
Ethyl-2-Cyanoacrylate	N.E.	N.E.	1	N.E.	mg/m^3

N. E. = Not Established

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.

Personal protective equipment

Eye/face protection – Wear safety goggles.

Skin protection – Wear impervious gloves as required to prevent skin contact.

Respiratory protection – Where air contaminants can exceed criteria, use NIOSH approved respiratory protection equipment.

Section 9 – Physical and Chemical Properties

a) **Appearance:** Clear, colorless liquid
b) **Odor:** Irritating
c) **Odor threshold:** No data available
d) **pH:** No data available
e) **Melting point/freezing point:** -30˚C/-22˚F
f) **Initial boiling point and boiling range:** 62˚C/144˚F
g) **Flash point:** 83˚C/181˚F
h) **Evaporation rate:** No data available
i) **Flammability:** No data available
j) **Upper/lower flammability or explosive limits:** No data available
k) **Vapor pressure:** 0.13 (mmHg @ 20˚C), 17.33 (Pa @ 20˚C)
l) **Vapor density:** >1
m) **Relative density:** 1.05 g/cm^3 (Water = 1 @ 25˚C)
n) **Solubility:** Insoluble in water (causes rapid polymerization)
o) **Partition coefficient:** No data available
p) **Auto-ignition temperature:** No data available
q) **Decomposition temperature:** No data available
r) **Viscosity:** 1,500 cps @ 25˚C
s) **VOC content:** 0 g/L (SCAQMD Method 316B)

Section 10 – Stability and Reactivity

Reactivity – No data available

Chemical stability – Stable under recommended storage conditions

Possibility of hazardous reactions – No data available

Conditions to avoid – High humidity, high temperatures, ultraviolet rays

Incompatible materials – Water, alcohol, basic compounds such as amines

Hazardous decomposition products – CO, CO_2, Nitrogen oxides

Section 11 – Toxicological Information

Information on likely routes of exposure

Inhalation – May cause irritation.

Ingestion - May be harmful if swallowed.

Skin – Bonds skin instantly. May cause an allergic skin reaction.

Eye –Causes serious eye irritation.

Symptoms related to physical, chemical and toxicological characteristics

No data available.

Delayed and immediate effects & also chronic effects from short & long term exposure

No data available.

Numerical measures of toxicity

No data available.

Carcinogenicity

This product contains a component that has been reported to possibly be carcinogenic based on its classification.

NTP – No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC – No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC.

OSHA – No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

ACGIH – No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Section 12 – Ecological Information

Ecotoxicity – No data available.

Persistence and degradability – No data available.

Bioaccumulative potential – No data available.

Mobility in soil – No data available.

Other adverse effects – No data available.

Section 13 – Disposal Considerations

Disposal should be in accordance with applicable local, regional and national laws and regulations.

Contaminated packaging – Dispose of as unused product.

Section 14 – Transport Information

UN number – Not a dangerous good.

UN proper shipping name – Not applicable.

Transport hazard class(es) – Not applicable.

Environmental hazards – No data available.

Transport in bulk – No data available.

Special precautions – No data available.

Section 15 – Regulatory Information

US Federal Regulations

SARA Title III: Section 311/312

Fire hazard
Immediate Health Hazard

SARA Title III: Section 313 & 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.

Canadian Regulations

Workplace Hazard Materials Information System (WHMIS)

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

Class B, DIV 3
Class D, DIV 2B

Canadian Environmental Protection Act (CEPA)

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

National Pollutant Release Inventory

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

None

Section 16 – Other Information

Version: 1.1
Revised: 5/13/15
Printed: 5/19/2015

HMIS Rating
Health **2**
Flammability **2**
Physical Hazard **1**
0-minimal, 1-slight, 2-moderate, 3-serious, 4-severe

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