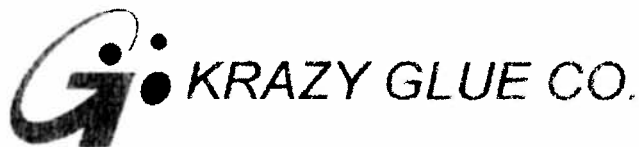


Material Safety Data Sheet



Conforms to ISO11014-1:1994

Date of revised: 4/3/09

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| | | |
|----------------------------|---|---|
| <i>Product name</i> | ARON ALPHA TYPE 453TB AA-738; AA-739 | <i>Emergency Telephone Number</i> CHEMTREC (800) 424-9300 |
| <i>Manufacturer's Name</i> | Krazy Glue Co., Div. of Toagosei America Inc. | |
| <i>Address</i> | 1450 West Main Street West Jefferson, OH 43162 | <i>Telephone Number for Information</i> (614) 879-9411 |

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

| Components (Specific Chemical Identity; Common Name(s) and CAS number) | OSHA PEL | ACGIH TLV | Other Limits Recommended | %(Optional) |
|---|-----------------------------|-----------------------------|-----------------------------|-------------|
| 1 Ethyl 2-Cyanoacrylate (CAS NO. 7085-85-0) | Not Listed | 1mg/m ³ (TWA) | | 85-95 |
| 2 Acrylic Copolymer (CAS NO. 26299-47-8) | Not Listed | Not Listed | | 5-15 |
| 3 Carbon Black (CAS NO. 1333-86-4) | 3.5 mg/m ³ (TWA) | 3.5 mg/m ³ (TWA) | | <3 |
| 4 Hydroquinone (CAS NO. 123-31-9) | 2mg/m ³ (TWA) | 2mg/m ³ (TWA); | | <0.3 |

SECTION 3 -- HAZARDS IDENTIFICATION

3.1 Emergency Overview

Physical State and Appearance = Black Liquid
Odor = Irritating

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

**CAUTION!
COMBUSTIBLE**

HMIS Rating

HEALTH = 2
FLAMMABILITY = 2
REACTIVITY = 1

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

3.2 Potential Health Effects

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. |

Delayed Hazards

Data not available

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 4 -FIRST AID MEASURES

INGESTION:

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:

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

Flash Point (Method Used)

COMBUSTIBLE LIQUID

83°C/181°F (closed cap)

Flammable Limits (% by Vol.)

| | |
|-----|-----|
| LEL | UEL |
| N/A | N/A |

Extinguishing Media

Dry Chemical, carbon dioxide

Special Fire Fighting Procedures

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

Unusual Fire and Explosion Hazards

None known

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED :

Eliminate all sources of ignition. Large quantities : Wipe and soak up material with absorbent like rags. Ventilate area. Material may be taken up on sand or clay absorbent. Small quantities : Soak up with absorbent material and remove to a chemical disposal area. Prevent entry into natural bodies of water.

Waste Disposal Method:

Immerse absorbent in a pail of water and dispose as oily rags.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING :

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. 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 Controls

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. If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.2 Personal 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. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--------------------------------------|--|
| Boiling Point (@ 532 Pa) | 62°C/144°F |
| Specific Gravity (H2O = 1 @ 25°C) | 1.05 |
| Vapor Pressure (mmHg @ 20°C) | 0.13 |
| (Pa @ 20°C) | 17.33 |
| Vapor Density (AIR = 1) | >1 |
| Melting Point | <-20°C |
| Evaporation Rate (Butyl acetate = 1) | N/A |
| Solubility in Water | Insoluble, water causes rapid polymerization |
| VOC content (g/L) | 0 (Method SCAQMD 316B) |
| Appearance and Odor | Black Liquid Irritating |

SECTION 10 - STABILITY AND REACTIVITY

Stability

Unstable: **X**
Stable:

Conditions to Avoid

High humidity, high temperature or ultraviolet ray.

Incompatibility

(Materials to Avoid)

Basic compounds such as amines.

Hazardous Decomposition or Byproducts

CO, CO₂, nitrogen oxides

Hazardous Polymerization

May Occur: **X**
Not Occur:

Conditions to Avoid

Contact with basic compound such as amines.

SECTION 11 - TOXICOLOGICAL INFORMATION

Route(s) of Entry :

Inhalation?
Yes

Skin?
No

Ingestion?
No

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

Signs and Symptoms of Exposure

Mild irritation of eyes, nose and throat

Medical Conditions Generally Aggravated by Exposure

Skin: Wash material off the skin with plenty of water.

Inhalation: Nasal mucous, headache and giddiness in some individuals.

Eye: Lachrymation and irritation.

SECTION 12 - ECOLOGICAL INFORMATION

No data available.

SECTION 13 - DISPOSAL INFORMATION

Recover free liquid. Absorb residue and dispose of according to local, state/provincial, and federal requirements. May contain explosive vapors. DO NOT cut, puncture or weld on or nearby

SECTION 14 - TRANSPORT INFORMATION

14.1 U.S. Department of Transportation (DOT)

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.
Combustible liquid

14.2 Canadian Transportation of Dangerous Goods (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

OSHA Hazard Communication Standard 29CFR1910.1200

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.

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 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.

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.