

SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company/undertaking

Trade name : Aron Alpha#201

Company/undertaking identification

Manufacturer : TOAGOSEI CO.,LTD.
Address : 1-14-1, Nishi-shimbashi, Minato-ku, Tokyo, 105-8419 Japan
Tel. : +81-3-3597-7275
Fax : +81-3-3597-7353
Emergency telephone number : +81-3-3597-7275(Head Office Division)

Importer :
Address :
Tel. :
Fax :
Emergency telephone number :

Recommended uses and restrictions : This product is used as an industrial adhesive. In using to the special applications for instance food, medical or agricultural chemicals, please check the safety in advance on your own. Please do not use this product for the implantation injected into the body, and also do not use it for the purpose that a portion of the product remains in the body.

2. Hazards identification

[GHS classification]

Physical hazards	Desensitized explosives	No classification
	Explosives	No classification
	Flammable gases	No classification
	Aerosols	No classification
	Oxidizing gases	No classification
	Gases under pressure	No classification
	Flammable liquids	Category 4
	Flammable solids	No classification
	Self-reactive substances and mixtures	Classification not possible
	Pyrophoric liquids	No classification
	Pyrophoric solids	No classification
	Self-heating substances and mixtures	Classification not possible
	Substances and mixtures which in contact with water emit flammable gases	No classification
	Oxidizing liquids	No classification
	Oxidizing solids	No classification
	Organic peroxides	No classification

Health hazards	Corrosive to metals	Classification not possible
	Acute toxicity (oral)	No classification
	Acute toxicity (dermal)	No classification
	Acute toxicity (inhalation:gas)	No classification
	Acute toxicity (inhalation:vapours)	Classification not possible
	Acute toxicity (inhalation:dust/mist)	Classification not possible
	Skin corrosion/irritation	Classification not possible
	Serious eye damage/eye irritation	Category 2
	Respiratory sensitization	Classification not possible
	Skin sensitization	Classification not possible
	Germ cell mutagenicity	Classification not possible
	Carcinogenicity	Classification not possible
	Reproductive toxicity	Classification not possible
	Specific target organ toxicity (single exposure)	Category 3 (respiratory tract irritation)
	Specific target organ toxicity (repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible	
Environmental hazards	Hazardous to the aquatic environment, short-term (acute)	Classification not possible
	Hazardous to the aquatic environment, long-term (chronic)	Classification not possible
	Hazardous to the ozone layer	Classification not possible

Other hazards which do not result in classification : May cause dermatitis/drunkenness by skin contact.

【Label elements】

Hazard pictograms (GHS JP)



GHS07

- Signal word (GHS JP) : Warning
- Hazard statements (GHS JP) : Combustible liquid (H227)
Causes serious eye irritation. (H319)
May cause respiratory irritation. (H335)
- Precautionary statements
- 【Prevention】 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
Avoid breathing mist, vapours. (P261)
Wash hands, forearms and face thoroughly after handling. (P264)
Use only outdoors or in a well-ventilated area. (P271)
Wear protective gloves, protective clothing, eye protection, face protection. (P280)
- 【Response】 : IF INHALED: Remove person to fresh air and keep comfortable for breathing (P304+P340)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Call a doctor if you feel unwell. (P312)
If eye irritation persists: Get medical advice/attention. (P337+P313)

In case of fire: Use dry sand, dry extinguishing powder, carbon dioxide (CO₂), foam to extinguish. (P370+P378)

【Storage】 : Store in a well-ventilated place. Keep container tightly closed. (P403+P233)
 Avoid direct sunlight and store in a cool, dark place with low humidity.
 No fires.
 Avoid storage with the Aron Alpha setter, the Aron Alpha accelerator.
 Store locked up. (P405)

【Disposal】 : Dispose of contents/container in accordance with local/regional/national/international regulations. (P501)

Overview expected state of emergency : No data available

3. Composition/information on ingredients

Distinction of substance or mixture : Mixtures

Generic name : Mixture of Ethyl 2-Cyanoacrylate and additives

Name	Concentration (%)	Formula	Inventory Lists (JAPAN) ENCS No	CAS-No.
Ethyl-2-cyanoacrylate	>= 95	C ₆ H ₇ NO ₂	2-2789	7085-85-0
Additives	<= 5	Trade secret	Present	Trade secret

Impurities and/or Stabilizing Additives which Contribute to the Classification : No data available

4. First aid measures

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing.
 Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing.
 If the clothes is in close contact with the skin, do not peel off by force.
 Do not peel solidified product off the skin.
 Wash with plenty of water.
 May cause burns by the heat of polymerization in case of contact with large amount of adhesive to skin or clothes.
 If skin irritation or rash occurs: Get medical advice/attention.
 Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for several minutes.
 Remove contact lenses, if present and easy to do. Continue rinsing.
 Solidified glue may irritate like a grain of sand and should be treated by an ophthalmologist.
 In case of eye irritation consult an ophthalmologist.

First-aid measures after ingestion : Rinse mouth.
 Do not induce vomiting.
 Get medical advice/attention if you feel unwell.

Most Important Symptoms/Effects	:	Irritating to eyes, respiratory system and skin. May cause skin irritation / dermatitis / skin burns.
Personal Protection in First Aid and Measures	:	Wear protective gloves/eye protection/face protection.
Notes to physician	:	Treat according to symptoms.

5. Fire fighting measures

Suitable extinguishing media	:	Dry sand, dry extinguishing powder, carbon dioxide (CO ₂), foam.
Unsuitable extinguishing media	:	Straight stream, water bucket.
Personal protection (Emergency response)	:	Wear full chemical protective clothing. Use appropriate respiratory protection.
Fire hazard	:	Harmful substances may be formed by incomplete combustion and/or high temperature. Combustible liquid
Specific fire fighting	:	Only allow access to authorised staff. Eliminate all ignition sources if safe to do so. Move undamaged containers from immediate hazard area if it can be done safely. Pay attention to the wind direction.

6. Accidental release measures

Personal Precautions, Protective Equipment and Emergency Procedures	:	Only allow access to authorised staff. See protective measures of SECTION 7 and 8.
Environmental precautions	:	Avoid release to the environment Collect spillage.

Decontamination/Absorption/Sweeping/Vacuuming/Neutralization

In case of small leakage	:	Wipe up with absorbent material (e.g. Cloth).
In case of large leakage	:	Prevent spread over a wide area (e.g. by containment or oil barriers).
Methods and Equipment for Containment and Cleaning up	:	Stop leak if safe to do so. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
Prevention Measures for Secondary Accidents	:	Eliminate all ignition sources if safe to do so.

7. Handling and storage

Handling

- Technical measures : Refer to SECTION 8 "Appropriate engineering controls".
- Precautions for safe handling : Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
Do not get in eyes, on skin, or on clothing.
Use personal protective equipment as required.
Because an exothermic reaction may be caused, do not use the protectors which are made of the easily-liquid-absorb-materials.
No open flames, No smoking.
Avoid breathing mist, vapours.
Use only outdoors or in a well-ventilated area.
- Prevents handling of incompatible substances or mixtures : Refer to SECTION 10.
- Hygiene measures : Do not eat, drink or smoke when using this product.
Avoid contact with skin, eyes and clothes.
Wash hands thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wash contaminated clothing before reuse.

Storage

- Technical measures : Comply with applicable regulations.
Observe the expiry date.
Proper grounding procedures to avoid static electricity should be followed.
- Incompatible substances or mixtures : Refer to SECTION 10.
- Storage conditions : Protect from moisture.
Keep container tightly closed and store in a cool place.
Avoid storage with the Aron Alpha setter, the Aron Alpha accelerator.
Keep in fireproof place.
- Material used in packaging/containers : Stainless steel, Aluminium, Polyethylene, Polypropylene
-

8. Exposure controls / Personal protection equipment

- Japan administration level : Not set
- Exposure limits (JSOH) : Not set
- Exposure limits (ACGIH) : TWA 0.2 ppm, STEL 1 ppm (Ethyl-2-cyanoacrylate)
- Appropriate engineering controls : Use explosion-proof electrical, ventilating, lighting equipment.
Provide sufficient washing facilities.
Provide adequate ventilation.
- Protective equipment
- Respiratory protection : In case of inadequate ventilation wear respiratory protection.
- Hand protection : PE (polyethylene) disposable gloves, rubber gloves.

Eye protection : Wear eye/face protection.
Skin and body protection : Lab apron
Protect eyes, face and skin from liquid splashes.

9. Physical and chemical properties

Physical state : Liquid (Clear liquid)
Colour : Colourless
Odour : Acrid, characteristic
pH : No data available
Melting point : No data available
Freezing point : No data available
Initial boiling point and boiling range : 60 – 62 °C at 667Pa 1)
Flash point : 85 °C Cleveland open-cup 1)
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Vapour pressure : 1 Pa at 25°C 1)
Relative density : 1.05 at 20°C 1)
Density : No data available
Relative gas density : No data available
Solubility : No data available
Partition coefficient n-octanol /water (log Kow) : No data available
Upper/lower flammability or explosive limits : No data available
Viscosity, dynamic : 1 – 5 mPa · s at 25°C 1)
Viscosity, kinematic : No data available
Particle size : No data available
Particle size distribution : No data available
Particle shape : No data available
Particle aspect ratio : No data available
Particle specific surface area : No data available

10. Stability and reactivity

Chemical stability : Stable without water(humidity).
May form flammable/explosive vapour-air mixture.
Possibility of hazardous reactions : Contact with water, incompatible materials may cause polymerization.
Conditions to avoid : Heat, water, humidity, open flames, over heat, direct sunlight, sparks
Incompatible materials : Water, amines, epoxy constituents
Hazardous decomposition products : CO, NOx and HCN can generate in case of decomposition.

11. Toxicological information

Acute toxicity (oral)	: The calculation applied by the equation was applied.
Acute toxicity (dermal)	: The calculation applied by the equation was applied.
Acute toxicity (gas)	: Not applicable, because of liquid defined by GHS.
Acute toxicity (vapour)	: No data available
Acute toxicity (dust)	: Not applicable, because of liquid defined by GHS.
Acute toxicity (mist)	: No data available
Skin corrosion/irritation	: No data available
Serious eye damage/irritation	: The sum of ingredients classified as Eye Category 2 is $\geq 10\%$.
Respiratory sensitization	: No data available
Skin sensitization	: No data available
Germ cell mutagenicity	: No data available
Carcinogenicity	: No data available
Reproductive toxicity	: No data available
Specific target organ toxicity (single exposure)	: An ingredient classified as Category 3 (respiratory tract irritation) is $\geq 20\%$.
Specific target organ toxicity (repeated exposure)	: No data available
Aspiration hazard	: No data available
Other health hazard	: No data available

Ethyl-2-cyanoacrylate

Acute toxicity (oral)	: LD50 rat : > 5000 mg/kg
Acute toxicity (dermal)	: LD50 rabbit : > 2000 mg/kg
Skin corrosion/irritation	: Category 2
Specific target organ toxicity (single exposure)	: Category 3 (respiratory tract irritation)

12. Ecological information

Ecotoxicity

Hazardous to Aquatic Environment - Short-term (acute) Hazard	: No data available
Hazardous to Aquatic Environment - Long-term (chronic) Hazard	: No data available

Persistence and degradability	:	No data available
Bioaccumulative potential	:	No data available
Ecology - soil	:	No data available
Hazardous to the ozone layer	:	Any ingredient listed in Annexes to the Montreal Protocol is not in the mixture.
Other information/references	:	Avoid release to the environmen.

13. Disposal considerations

Ecology - waste materials	:	Dispose of contents/container in accordance with local/regional/national/international regulations. Consign it to a licensed industrial waste disposal company and process it. For waste disposer, notice of risk and hazardousness when dealing with waste.
Contaminated container and packaging	:	Prior to disposal for empty container, remove contents completely. After cleaning, recycle or dispose of in compliance with current legislation.

14. Transport information

International Regulations

Regulatory information by sea	:	Nonhazardous material
UN-No. (IMDG)	:	Not subject
Marine pollutant	:	Not applicable
Regulatory information by air	:	Conform to the provisions of ICAO/IATA.
UN-No. (IATA)	:	UN3334
Proper Shipping Name (IATA)	:	Aviation regulated liquid, n.o.s. (Ethyl 2-Cyanoacrylate)
Class	:	9
Packing group	:	III

Regulations in Japan

Regulatory information by road or rail	:	Conform to the provisions of the Fire Service Act, the Poisonous and Deleterious Substances Control Law, the High Pressure Gas Safety Law.
Regulatory information by sea	:	Nonhazardous material
UN-No.	:	Not subject
Marine pollutant	:	Not applicable
Regulatory information by air	:	Conform to the provisions of the Civil Aeronautics Law.
UN-No.	:	UN3334
Proper Shipping Name	:	Aviation regulated liquid, n.o.s.(Ethyl 2-Cyanoacrylate)

Class	:	9
Packing group	:	III
Special transport precautions	:	Avoid direct sunlight during transport. Prevent from container broken, corroded and leakage. Ensure the prevention of collapse of cargo. Do not transport with food and feedstuffs. Do not put up heavy things.

15. Regulatory information

Fire Service Law(Japan)	:	Group 4, Flammable Liquids, Class 3 petroleum, Water-insoluble liquids (Act, Art.2, Para.7, Appended Table 1, Group 4)
Chemical Substances Control Law(Japan)	:	General Chemical Substances
Japanese Pollutant Release and Transfer Register Law (PRTR Law)	:	Not applicable
Japanese Poisonous and Deleterious Substances Control Law	:	Not applicable
Port Regulation Law (JAPAN)	:	Nonhazardous material
Ship Safety Act (JAPAN)	:	Nonhazardous material
Civil Aeronautics Law(JAPAN)	:	Miscellaneous dangerous substances & articles(Hazardous materials notice Appended Table 1 Article 194 of the Enforcement Regulations)

16. Other information

This data sheet is prepared according to JIS Z 7252:2019 and JIS Z 7253:2019.

Other	:	LIST OF ABBREVIATION : JSOH ; Japan Society for Occupational Health ACGIH ; American Conference of Governmental Industrial Hygienists IMDG ; International Maritime Dangerous Goods IATA ; International Air Transport Association
Data sources	:	1) Data measured by TOAGOSEI 2) Data from raw material manufacturer SDS 3) NITE public data

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
