Material Safety Data Sheet

AXIA 231

I. Chemical Product and Company Identification

A. Product Name:

AXIA 231

B. Recommended uses and restrictions on use of the product:

Adhesives, sealants (not for use outside use)

C. Manufacturer information

1) Company Name: ALTECO KOREA, INC.

2) Address: 114 Suworam 4-gil, Seotan-myeon, Pyeongtaek-si, Gyeonggi-do, Korea

3) Contact Information: +82-31-663-8150

II. Hazards Identification

A. Hazard · Risk Classification

Skin sensitization: Category 1

Specific target organ toxicity (single exposure): Category 3 (respiratory tract irritation)

B. Label elements including precautionary statements

Symbol



Signal word

Warning

Hazard · Risk statement

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

Precautionary statement

[Prevention]

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

[Response]

P302+P352 If on skin: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P321 Specific treatment (see on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

[Storage]

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

III. Composition / Information on Ingredients

Ingredients	Other name	CAS No.	%
Ethyl Cyanoacrylate	ECA; ETHYL CYANOACRYLATE; 2-CYANO-2-PROPENOIC ACID, ETHYL ESTER	7085-85-0	98 – 100

IV. First aid measures

A. Eye contact

Get emergency medical attention.

In case of contact with substance, wash skin and eyes immediately with running water for more than 20 minutes.

B. Skin contact

In the case of hot materials, immerse or wash affected areas in a large amount of cold water to remove heat.

Get emergency medical attention.

Remove contaminated clothing and shoes and isolate contaminated areas.

In case of contact with substance, wash skin and eyes immediately with running water for more than 20 minutes.

Avoid dispersal of the contaminated material in the presence of minor skin contact.

If skin irritation or rash occurs, seek medical advice • seek advice.

Wash with plenty of soap and water.

C. Inhalation

If excessive dust or fumes are present, remove with clean air and seek medical attention if coughing or other symptoms occur.

If not breathing, give artificial respiration.

If breathing is difficult, give oxygen.

D. Ingestion

Get emergency medical attention.

E. Indication of immediate medical attention and notes for physician

Have medical personnel perceive and take protective action against the substance.

V. Fire Fighting Measures

A. Suitable Extinguishing Media

Use alcohol foam, carbon dioxide or water spray for digestion related to this material.

Use dry sand or earth for digestion.

B. Specific hazards arising from the chemical

Container may explode on heating.

Some can ride, but not easily ignite.

Non-flammable, the substance itself is not burned but decomposes on heating and may cause corrosive / toxic fumes.

May cause irritating, corrosive and toxic gases in case of fire.

C. Special protective equipment and precautions for fire-fighters

Rescuers should wear appropriate protective equipment.

Keep out of the reach of children and keep at a safe distance.

Be aware that it may be melted and transported.

Drill ditches for the disposal of digestive waters to prevent them from being scattered.

Move containers from fire area if it is not hazardous.

In case of fire, use fire extinguisher at maximum distance or use unmanned fire fighting equipment.

Cool the container with plenty of water after the fire has extinguished.

In the event of a tank fire, if there is a high tone in the pressure relief device or if the tank is discolored, immediately withdraw it.

Tank escape from a flamed tank during a fire.

In the event of a large fire in a tank fire, use unmanned fire fighting equipment and allow it to retreat if it is impossible.

VI. Accidental Release Measures

A. Personal precautions, protective equipment and emergency procedures

Wipe off any spills immediately and follow all protective precautions.

Remove all ignition sources.

Stop the leak if it is not dangerous.

Do not touch the container or leaks without wearing appropriate protective clothing.

Cover with plastic sheet to prevent spreading.

Note the substances and conditions to avoid.

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

B. Environmental precautions and protective procedures

Prevent entry into waterways, sewers, basements and confined areas.

C. Methods and materials for containment and cleaning up

Absorb spillage with inert material (eg dry sand or earth) and place in a chemical waste container.

Absorb liquid and rinse contaminated area with detergent and water.

VII. Handling and Storage

A. Precautions for safe handling

Follow all MSDS / label precautions, as product residues may remain even after the container has been emptied.

Handle / store carefully.

Carefully open the stopper before opening.

Avoid prolonged or repeated skin contact.

Note the substances and conditions to avoid.

Refer to engineering controls and personal protective equipment.

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

Handle it outdoors or in a well-ventilated area.

Do not carry contaminated clothing out of the workplace.

B. Conditions for safe storage

Keep container tightly closed in a well-ventilated place.

The empty drum should be completely drained, properly blocked and immediately returned to the drum regulator or properly positioned.

VIII. Exposure Controls & Personal Protection

A. Chemical exposure standards, biological exposure equipment

ACGIH regulations TWA 0.2 ppm

B. Appropriate engineering controls

If dust, fumes or mist are generated during operation, ventilate to keep air contamination below the exposure limit.

C. Personal protective equipment

Respiratory protection Wear respiratory protection product approved by KOSHA according to

physicochemical properties of exposed material.

Eye protection Wear respiratory protection product approved by KOSHA according to

physicochemical properties of exposed material.

Hands protection Wear respiratory protection product approved by KOSHA according to

physicochemical properties of exposed material.

Body protection Wear respiratory protection product approved by KOSHA according to

physicochemical properties of exposed material.

IX. Physical/Chemical Characteristics

Physical State	Clear Liquid
Odor	Irritating odor
Odor threshold	No data
рН	No data
Melting point / freezing point($^{\circ}$ C)	No data
Initial boiling point and boiling range(°C)	54 @3mmHg
Flash point(${}^{\mathbb{C}}$)	93 (Cleveland open-cup method)
Evaporation rate	No data
Flammability(solid, gas)	No data
Upper/lower flammability or explosive limits	No data
Vapor Pressure	< 0.2mmHg @24℃

Solubility (in H2O)	0.321g/100ml @24℃
Vapor density(air=1)	3.0
Relative density(water=1)	1.05 @24℃
Partition coefficient: n-octanol/water	1.42
Auto-ignition temperature	No data
Decomposition temperature	No data
Viscosity(cps,@25℃)	3
Molecular weight	124.98

X. Stability & Reactivity

A. Chemical Stability and possibility of hazardous reactions

Container may explode on heating.

Some can ride, but not easily ignite.

Non-flammable, the substance itself is not burned but decomposes on heating and may cause corrosive / toxic fumes.

May cause irritating, corrosive and toxic gases in case of fire.

B. Conditions to avoid

Heat source, spark, flame, etc.

C. Incompatible materials

Combustible materials, reducing materials, metals.

D. Hazardous decomposition products

Corrosive / toxic fume.

Irritating, corrosive, toxic gas.

XI. Toxicological Information

A. Information on the likely routes of exposure

May cause irritation, allergic reactions, lung congestion

No information on significant side effects

May cause irritation (possibly severe), allergic reactions

May cause irritation and eye damage

B. Health hazard information

Acute toxicity

Oral LD50 > 5,000 mg/kg Rat

Dermal LD50 > 2,000 mg/kg Rabbit

Inhalation No data
Skin corrosive/irritant No data
Serious eye damage/eye irritation No data
Respiratory sensitization No data

Skin sensitization Contact dermatitis, patch test result-positive reaction

No data

No data

Carcinogenicity

IARC No data

OSHA No data

ACGIH No data

NTP No data

EU CLP No data

Germ Cell Mutagenicity No data

Reproductive toxicity No data

Specific target organ toxicity

(single exposure)

Respiratory tract irritation in rats, humans

Specific target organ toxicity

(repeated exposure)

Aspiration hazard No data

Other hazard effects No data

XII. Ecological Information

A. Aquatic and terrestrial ecotoxicity

Fish No data
Shellfish No data
Algae No data

B. Persistence and degradability

Persistence No data
Resolvability No data

C. Bioaccumulative potential

Concentration No data
Bio-resolvability No data

D. Mobility in soil

No data

E. Other adverse effects

No data

XIII. Disposal Considerations

A. Disposal method

Dispose of contents and container in accordance with local regulations.

B. Disposal precaution

Dispose of contents container according to the regulations.

XIV. Transportation Information

A. UN number

No data available

B. UN proper shipping name

N/A

C. Transport hazard class

N/A

D. Packing group

N/A

E. Marine pollution

N/A

F. Special precaution which a user to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises

Emergency procedure at fire

Refer to Section 5. Fire Fighting Measures

Emergency procedure at leakage

Refer to Section 6. Accidental Release Measures

* This product is NOT classified as dangerous for IATA Transport.

XV. Regulatory Information

A. Industrial safety and health Act

N/A

B. Chemicals control Act

N/A

C. Hazardous material Safety control Act

4th Class Flammable Liquids, Class 3 Petroleum

D. Wastes control Act

N/A

E. Regulations in other domestic and foreign

Foreign regulations

EU classification information (definitive classification result)

Xi; R36/37/38

EU classification information (risk phrases)

R36/37/38

EU classification information (safety phrases)

S2, S23, S24/25, S26

XVI. Other Information

A. Information source and references: Korea Occupational Safety and Health Agency

Korea Fire Institute

(Hazardous material classification & flash point test)

B. Issuing Date: September 18, 2007

C. Revision number and date: 12th times, Nov 21, 2022

D. Others:

The data contained herein are furnished for information only and are believed to be reliable. However, Alteco Korea, Inc. does not assume responsibility for any results obtained by persons over whose methods Alteco Korea, Inc. has no control. It is the user's responsibility to determine the suitability of Axia products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Axia products. In light of the foregoing, specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Axia products. Alteco Korea, Inc. further disclaims any liability for consequential or incidental damages of any kind, including lost profits.