

SAFETY DATA SHEET

SDS No. : 105724EU
Issue Date : 13 Jun. 2019
Revision Date : 30 Nov. 2021
Ver.2.0

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

1.1 Product identifier

Product name : ELUENT 90A

1.2 Relevant identified uses of the substance or mixture and uses advised against

The product is applicable for the following purpose of use only. Use exclusive reagents for ADAMS A1c HA-8190V.

1.3 Details of the supplier of the safety data sheet

ARKRAY FACTORY, Inc.

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1.4 Emergency telephone number

Emergency phone : +31-20-545-2450 (9:00~17:00)

2. Hazards Identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to REGULATION (EC) No 1272/2008.

2.2 Label elements

The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Other hazards

Containing sodium azide, may form toxic and explosive hydrogen azide by reacting with acid.

May form explosive-sensitive azidation with heavy metals (especially lead, silver, mercury or chemical compound of these materials) in the presence of water.

Containing Sodium perchlorate, mixture of dry powder of this product and combustible or metallic powder may explode if shocked or heated.

Sodium azide and Sodium perchlorate contained in this product causes mucous membrane irritation.

3. Composition/information on ingredients

3.2 Mixtures

Component	Conc. [wt%]	Formula	EINECS No.	CAS No.	Classification Regulation(EC) 1272/2008(CLP)
Sodium perchlorate	< 1.0	NaClO ₄	231-511-9	7601-89-0	Ox. Sol 1; H271, Acute Tox. (oral) 4; H302
Sodium azide	< 0.1	NaN ₃	247-852-1	26628-22-8	Acute Tox. (oral) 2; H302, Aquatic Acute 1; H400, Aquatic Chronic 1; H410

4. First aid measures

4.1 Description of first aid measures.

General notes

Consult a physician. Show this safety data sheet to the doctor in attendance.

Following inhalation

Remove to casualty to fresh air and keep at rest in a position comfortable for breathing.

Call a doctor/physician if respirative symptom appears.

Following skin contact

Wash immediately with plenty of water and soap.

Get medical attention if skin irritation or rash occurs.

Wash contaminated clothing before reuse.

Following eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Call a doctor/physician if eye irritation persists.

Following ingestion

Rinse mouth.

Get medical advice/attention if you feel unwell.

Self-protection of the first aider

Wear protective equipment to avoid contact with skin and eyes.

4.2 Most important symptoms and effects, both acute and delayed

No relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No relevant information available.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

This product is aqueous solution and non-combustible.

Unsuitable extinguishing media

Not specified

5.2 Special hazards arising from the substance or mixture

May form irritating, toxic or corrosive gas in fire.

5.3 Advice for firefighters

Special firefighting procedures

Remove movable containers from fire occurrence area if safe to do so. Fire-extinguishing work is done from the windward as possible. If immovable, cool containers and surrounding area with water spray.

Special protective equipment for firefighters

When extinguishing fire, be sure to wear suitable personal protective equipment (gloves, goggle, mask, etc.).

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

A worker should wear suitable personal protective equipment (see section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION) to avoid eye or skin contact, or inhalation of gas, mist, etc.

6.1.2 For emergency responder

Stay away from the contaminated area.

6.2 Environmental precautions

Wear suitable protective equipment.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment:

Stop leak if possible without risk.

6.3.2 For cleans up:

Wash away the area with large amount of water after collecting spilled material.

Or wipe up before drying. Wash waste cloth used for cleaning with large amount of water.

6.3.3 Other information:

No relevant information available.

6.4 Reference to other sections

Prevention of secondary hazards

Prevent this product from drying out to avoid deposition of oxidizing substance.

Avoid contact with acid.

For personal protection see Section 8.

For disposal see Section 13.

7. Handling and storage

7.1 Precautions for safe handling

Preventive measures (Exposure Control for handling personnel)

Use suitable protective equipment. For personal protection see Section 8.

Wash hands and gargle after handling. Do NOT eat, drink, or smoke during handling.

Technical measures

Perform engineering control listed in section 8.

EXPOSURE CONTROLS / PERSONAL PROTECTION and wear personal protective equipment.

Local ventilation / General ventilation

Handle only in the open air or a well ventilated area.

Precautions on safe handling

Avoid contact with acid.

Do not handle containers roughly (falling, dropping,, giving a shock, etc.).

7.2 Conditions for safe storage, including any incompatibilities**Technical measures**

Store only in well-ventilated areas.

Incompatible materials

Avoid contact with acid.

Storage conditions

Protect against direct sunlight.

Keep container tightly closed in 3 to 30°C.

Keep the residuals only in the original container.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls/personal protection**8.1 Control parameters**

Not set up.

8.2 Exposure controls**8.2.1 Appropriate engineering controls**

It is desirable to install local exhaust ventilations.

Install eye wash station and safety shower in every work area this product is handled.

8.2.2 personal protection equipment:**8.2.2.1 Eye/face protection**

Wear safety goggles / face-shield.

8.2.2.2 Skin protection

Hand protection

Wear suitable impervious gloves.

Other skin protection:

Wear protective clothing, if necessary.

8.2.2.3 Respiratory protection

Wear suitable mask.

8.2.2.4 Thermal hazards

No information available.

8.2.3 Environmental exposure controls

No information available.

9. Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state	liquid
Colour	Colorless

Odour	None
Odour threshold	No data available
Melting point/freezing point	No data available
Boiling point and boiling range	No data available(Mixture) 100 °C (Water)
Flammability	No data available
Lower and upper explosion limit	No data available
Flash Point	This product is aqueous solution and non-inflammable.
Auto-ignition temperature	This product is aqueous solution and non-combustible.
Decomposition temperature	No data available
pH	5.2~5.5
Kinematic viscosity	No data available
Solubility	No data available
Partition coefficient n-octanol/water(log value)	No data available
Vapour pressure	No data available
Density and/or relative density	No data available
Relative vapour density	No data available
Particle characteristics	Not applicable

9.2 Other information

No further relevant information available.

10. Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under proper conditions.

10.3 Possibility of hazardous reactions

Stable under proper conditions but note the following:

Sodium azide may form toxic and explosive hydrogen azide by reacting with acid. May form explosive-sensitive azidation with heavy metals (especially lead, silver, mercury or chemical compound of these materials) in the presence of water. As mixture of Sodium perchlorate and combustible or metallic powder may explode if shocked or heated, prevent this product from drying out to avoid deposition of Sodium perchlorate.

10.4 Conditions to avoid.

Shock, heat

10.5 Incompatible materials

Strong acid

10.6 Hazardous decomposition products

Hydrogen azide

11. Toxicological information

11.1 Information on hazard classes as defined in Regulation(EC) No 1272/2008

Acute toxicity	
Oral	ATEmix >2000mg/kg (calculated toxicity value based on information on ingredients)
Dermal	ATEmix >2000mg/kg (calculated toxicity value based on information on ingredients)
Inhalation	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.(
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

11.2 Information on other hazards

No product data available.

12. Ecological information

12.1 Toxicity

Based on available data, the classification criteria are not met.(Mixture)

(Sodium perchlorate)

Toxicity to fish static test LC50 - Danio rerio (zebra fish) - > 1.000 mg/l - 96 h
 Toxicity to daphnia and static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
 other aquatic invertebrates
 Toxicity to algae static test EC10 - Pseudokirchneriella subcapitata (green algae) - > 435,7 mg/l - 72 h
 static test EC50 - Pseudokirchneriella subcapitata (green algae) - > 435,7 mg/l - 72 h

(Sodium azide)

Algae (Pseudokirchneriella subcapitata) ErC50/96H 348µg/L

12.2 Persistence and degradability

Based on available data, the classification criteria are not met.(Mixture)

1% (by HPLC) (Sodium azide)

12.3 Bioaccumulative potential

Based on available data, the classification criteria are not met.(Mixture)

Low residualibity(Sodium azide)

12.4 Mobility in soil

Based on available data, the classification criteria are not met.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7 Other adverse effects

No data available.

13. Disposal considerations**13.1 Waste treatment methods****13.1.1 Product/Packaging disposal**

If the product is unused, dilute the product with a large amount of water before disposing.

13.1.2 Waste treatment-relevant information

Remove the product from containers completely, and dispose of in accordance with the regulations.

13.1.3 Sewage disposal-relevant information

Do not dump this product into sewers, on the ground or into any body of water.

13.1.4 Other disposal recommendations

If used product, ask a licensed disposal company.

Observe all federal, state, and local environmental regulation.

14. Transport information**14.1 UN number or ID number**

ADR/RID: N/A

IMDG: N/A

IATA: N/A

14.2 UN proper shipping name

ADR/RID: N/A

IMDG: N/A

IATA: N/A

14.3 Transport hazard class(es)

ADR/RID: N/A

IMDG: N/A

IATA: N/A

14.4 Packing group

ADR/RID: N/A

IMDG: N/A

IATA: N/A

14.5 Environmental hazards

ADR/RID: N/A

IMDG Marine pollutant: N/A

IATA: N/A

14.6 Special precautions for user

When transporting, make sure that there are no leaks in the container, load it so that it does not fall over, fall, or be damaged, and make sure to prevent it from collapsing.

14.7 Maritime transport in bulk according to IMO instruments

No relevant information available.

15. Regulatory information**15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture**

(EC) No 1907/2006 (REACH).

(EC) No 1272/2008 (CLP).

(EU) No 453/2010.

(EU) No 2015/ 830

(EU) 2020/878

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16. Other information

The date of preparation and revision of the SDS

Ver.1.0	Prepared on 13 June 2019.	
Ver2.0	Revised on 30 November 2021:	Revised a new format in accordance with Regulation(EU) 2020/878.

Key literature references

Package insert

IMDG Code

IATA Dangerous Goods Regulations

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Not applicable

Further information

The above information contained herein is based on the data available to us and is believed to be correct. However, ARKRAY, Inc. bears no warranty expresses or implies regarding the accuracy of these data or the results to be obtained from the use thereof.

ARKRAY, Inc. assumes no responsibility for injury caused from the use of the product described herein.