19.09.2024	Kit Components	
Product code	Description	
CAY748-VxxAAE	CA71HA Reagent Set for hardness	
Components:		
51515586A	Reagent HA-A1 for hardness	
71256683A	Reagent HA-A2 for hardness	

according to Regulation (EC) No 1907/2006, Article 31

Endress+Hauser 🖽

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People for Process Automation

Printing date 19.09.2024 Version 7 (replaces version 6) Revision: 19.09.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Reagent HA-A1 Synonym: for hardness
Article number: 51515586A

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

No further relevant information available.

Application of the substance / the mixture Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Endress+Hauser Conducta GmbH+Co. KG Dieselstraße 24 D-70839 Gerlingen

Further information obtainable from:

Phone: +49 (0)7156 209-10117 E-Mail: MSDS.PCC @endress.com

1.4 Emergency telephone number: 0091-26589391

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified, according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Additional information:

Safety data sheet available on request.

2.3 Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:				
CAS: 497-19-8 EINECS: 207-838-8		1 Eye Irrit. 2, H319	1-2.5%	

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

(Contd. on page 2)

according to Regulation (EC) No 1907/2006, Article 31

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Trade name: Reagent HA-A1

(Contd. of page 1)

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: no further information

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters *No further relevant information available.*

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling *No special precautions are necessary if used correctly.* **Information about fire - and explosion protection:** *No special measures required.*

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Storage class: 12

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Respiratory protection: Not required.

(Contd. on page 3)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 7 (replaces version 6) Revision: 19.09.2024

Trade name: Reagent HA-A1

(Contd. of page 2)

Hand protection

To avoid skin problems reduce the wearing of gloves to the required minimum.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. No chemical-protective gloves required.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection Goggles recommended during refilling

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical stateFluidColour:Yellow tintOdour:CharacteristicOdour threshold:Not determined.

Melting point/freezing point: 0 °C

Boiling point or initial boiling point and boiling

range 100 °C

Flammability Not applicable.

Lower and upper explosion limit

Lower:Not determined.Upper:Not determined.Flash point:Not applicable.Decomposition temperature:Not determined.

pH at 20 °C 9-11

Viscosity:

Kinematic viscosity

Dynamic:

Not determined.

Not determined.

Solubility

water: Not miscible or difficult to mix.

Partition coefficient n-octanol/water (log value) Not determined.

Vapour pressure at 20 °C: 23 hPa

Density and/or relative density

Density:Not determined.Relative densityNot determined.Vapour densityNot determined.

9.2 Other information

Appearance:

Form: Liquid

Important information on protection of health

and environment, and on safety.

Ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Not determined.

Solvent content:

 Water:
 95.8 %

 Solids content:
 0.0 %

(Contd. on page 4)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 7 (replaces version 6) Revision: 19.09.2024

Trade name: Reagent HA-A1

(Contd. of page 3)

Change in condition

Evaporation rate Not determined.

Information with regard to physical hazard

classes

Explosives Void Flammable gases Void **Aerosols** Void Oxidising gases Void Gases under pressure Void Flammable liquids Void Flammable solids Void Self-reactive substances and mixtures Void **Pyrophoric liquids** Void Pyrophoric solids Void Self-heating substances and mixtures Void Substances and mixtures, which emit flammable gases in contact with water Void **Oxidising liquids** Void **Oxidising solids** Void Organic peroxides Void Corrosive to metals Void **Desensitised explosives** Void

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- **10.3 Possibility of hazardous reactions** *No dangerous reactions known.*
- 10.4 Conditions to avoid No further relevant information available.
- **10.5 Incompatible materials:** *No further relevant information available.*
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

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

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

LD/LC50 values relevant for classification:

CAS: 497-19-8 sodium carbonate

Oral LD50 4,090 mg/kg (rat)

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

Endocrine disrupting properties

None of the ingredients is listed.

(Contd. on page 5)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 7 (replaces version 6) Revision: 19.09.2024

Trade name: Reagent HA-A1

(Contd. of page 4)

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADN, IMDG, IATA Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class

14.4 Packing group

ADR, IMDG, IATA Void

14.5 Environmental hazards:Not applicable.14.6 Special precautions for userNot applicable.

14.7 Maritime transport in bulk according to IMO

instruments Not applicable.

UN "Model Regulation": Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

(Contd. on page 6)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 7 (replaces version 6) Revision: 19.09.2024

Trade name: Reagent HA-A1

(Contd. of page 5)

National regulations:

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

16.1 Relevant phrases

H319 Causes serious eye irritation.

16.3 Recommended restriction of use

Department issuing SDS: PCC-TWR Contact: MSDS.pcc@endress.com Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

* Data compared to the previous version altered.

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according to Regulation (EC) No 1907/2006, Article 31

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Printing date 19.09.2024 Version 5 (replaces version 4) Revision: 19.09.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Reagent HA-A2 Synonym: for hardness Article number: 71256683A

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

No further relevant information available.

Application of the substance / the mixture Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Endress+Hauser Conducta GmbH+Co. KG Dieselstraße 24 D-70839 Gerlingen

Further information obtainable from:

Phone: +49 (0)7156 209-10117 E-Mail: MSDS.PCC@endress.com

1.4 Emergency telephone number: 0091-26589391

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



Flam. Liq. 2 H225 Highly flammable liquid and vapour.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02

Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapour.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

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

regulations.

2.3 Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

PBT: Not applicable.

(Contd. on page 2)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 5 (replaces version 4) Revision: 19.09.2024

Trade name: Reagent HA-A2

vPvB: Not applicable.

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 64-17-5 ethanol EINECS: 200-578-6

nanol 🌎 🍪 Flam. Liq. 2, H225

30-50%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately rinse with water.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: no further information

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters *No further relevant information available.*

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

6.2 Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Contd. on page 3)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 5 (replaces version 4) Revision: 19.09.2024

Trade name: Reagent HA-A2

(Contd. of page 2)

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Keep away from heat and direct sunlight.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Storage class: 3

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Respiratory protection: Not required.

Hand protection



Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

Only use chemical-protective gloves with CE-labelling of category III.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. No chemical-protective gloves required.

Material of gloves

Nitrile rubber. NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

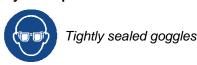
according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 5 (replaces version 4) Revision: 19.09.2024

Trade name: Reagent HA-A2

(Contd. of page 3)

Eye/face protection



Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state Fluid
Colour: Yellow
Odour: Alcohol-like
Odour threshold: Not determined.
Melting point/freezing point: Undetermined.

Boiling point or initial boiling point and boiling

range 78 °C

Flammability Highly flammable.

Lower and upper explosion limit

Lower:3.5 Vol %Upper:15 Vol %Flash point: $< 23 ^{\circ}\text{C}$ Auto-ignition temperature: $425 ^{\circ}\text{C}$

Decomposition temperature: Not determined.

pH Neutral

Viscosity:

Kinematic viscosity Dynamic:Not determined.
Not determined.

Solubility

water: Fully miscible.

Partition coefficient n-octanol/water (log value) Not determined.

Vapour pressure at 20 °C: 59 hPa

Density and/or relative density

Density:Not determined.Relative densityNot determined.Vapour densityNot determined.

9.2 Other information

Appearance:

Form: Liquid

Important information on protection of health

and environment, and on safety.

Ignition temperature: Product is not selfigniting.

Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

Solvent content:

 Organic solvents:
 42.0 %

 Water:
 57.7 %

 Solids content:
 0.0 %

Change in condition

Evaporation rate Not determined.

Information with regard to physical hazard

classes

Explosives Void
Flammable gases Void
Aerosols Void

(Contd. on page 5)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 5 (replaces version 4) Revision: 19.09.2024

Trade name: Reagent HA-A2

(Contd. of page 4)

Oxidising gases Void Gases under pressure Void

Flammable liquids Highly flammable liquid and vapour.

Flammable solids Void Self-reactive substances and mixtures Void **Pyrophoric liquids** Void Pyrophoric solids Void Self-heating substances and mixtures Void Substances and mixtures, which emit flammable gases in contact with water Void Oxidising liquids Void **Oxidising solids** Void

Organic peroxides Void Corrosive to metals Void **Desensitised explosives** Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- 10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity Based on available data, the classification criteria are not met

-Addic to	Additional Education and Available data, the diagonication officing are not met.			
LD/LC50 values relevant for classification:				
CAS: 64	l-17-5 etha	nnol		
Oral	1 D50	7.060 mg/kg (rat)		

7,060 mg/kg (rat) Inhalative LC50/4 h 20,000 mg/l (rat)

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

Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

- 12.2 Persistence and degradability No further relevant information available.
- **12.3 Bioaccumulative potential** *No further relevant information available.*
- **12.4 Mobility in soil** No further relevant information available.

(Contd. on page 6)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 5 (replaces version 4) Revision: 19.09.2024

Trade name: Reagent HA-A2

(Contd. of page 5)

12.5 Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN number or ID number

IMDG, IATA UN1170

14.2 UN proper shipping name

ADR

UN1170 ETHANOL SOLUTION (ETHYL ALCOHOL

SOLUTION)

IMDG ETHANOL SOLUTION (ETHYL ALCOHOL

SOLUTION)
Ethanol solution

14.3 Transport hazard class(es)

ADR

IATA



Class 3 (F1) Flammable liquids.

Label 3

IMDG, IATA



Class 3 Flammable liquids.

Label 3

14.4 Packing group

ADR, IMDG, IATA //

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Warning: Flammable liquids.

Hazard identification number (Kemler code): 33

EMS Number: F-E,S-D

Stowage Category A

(Contd. on page 7)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 5 (replaces version 4) Revision: 19.09.2024

Trade name: Reagent HA-A2

(Contd. of page 6)

14.7 Maritime transport in bulk according to IMO

instruments Not applicable.

Transport/Additional information:

Limited quantities (LQ) 11 **Transport category** 2 **Tunnel restriction code** D/E

IMDG

Limited quantities (LQ) 1L

Excepted quantities (EQ) Code: E2

> Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL **UN "Model Regulation":**

SOLUTION), 3, II

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapour.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower].

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

regulations.

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

National regulations:

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water. 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

16.1 Relevant phrases

H225 Highly flammable liquid and vapour.

(Contd. on page 8)

according to Regulation (EC) No 1907/2006, Article 31

Printing date 19.09.2024 Version 5 (replaces version 4) Revision: 19.09.2024

Trade name: Reagent HA-A2

(Contd. of page 7)

16.3 Recommended restriction of use

Department issuing SDS: *PCC-TWR* **Contact:** *MSDS.pcc* @*endress.com* **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning

the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the

International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

* Data compared to the previous version altered.

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