(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 08 March 2021

Date printed: 16 August 2023

Section 1. Identification

1.1 Product Identifier 2687

Product Name ALUMINIUM STANDARD SOLUTION 0.1ppm (as Al)

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the

annual tonnage does not require a registration or the registration is envisaged for a

later date.

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Not classified as hazardous.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Not classified as hazardous.

Section 3. Composition

3.2 Mixtures

No hazardous components.

Section 4. First Aid

4.1 Description of first aid measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open.

Skin Wash off skin thoroughly with water.

Inhalation Remove from exposure.

Ingestion Wash out the patients mouth thoroughly with water.

Personal protection for first Wear protective gloves / eye protection.

aiders

4.2 Most important symptoms and effects, both acute & 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. Fire Fighting

5.1 Extinguishing media

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards Presents no specific fire danger.

5.3 Advice for firefighters

Advice for firefighters Consider all other materials in the vicinity.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Presents no major hazards.

6.2 Environmental precautions

Environmental Presents no major environmental hazard.

6.3 Methods and material for containment and cleaning up

Major Spillage Wash area down with copious amounts of water.

Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

No specific precautions.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Exposure data source(s) No hazardous components.

8.2 Exposure controls

Respiratory Protection Presents no significant inhalation health hazard.

Hand Protection Use nitrile gloves or PVC gauntlets.

Eye Protection No specific hazard through eye contact although the wearing of safety glasses is advised. Skin Protection If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Clear colourless liquid. Appearance No specific odour. Odour 7 @ 20°C pН **Boiling Point** Aqueous solution Melting Point Not applicable Flash Point Not applicable Upper Flammable Limit Not applicable Not applicable Lower Flammable Limit Auto Ignition Not applicable

Explosive Properties No. Oxidising Properties No.

Vapour Pressure Not applicable Relative Density 1.0000

Water Solubility Completely soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

10.3 Possibility of hazardous

reactions

No data available.

10.4 Conditions to Avoid No specific conditions.

10.5 Incompatable Materials No specific materials to avoid.

10.6 Hazardous Decomposition None unusual.

Products

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes Presents no significant health hazard to the eyes.

Skin Presents no significant hazard by skin contact.

LD50 Skin Not available

Ingestion Presents no significant hazard by ingestion.

LD50 Oral Not available

Inhalation Presents no significant health hazard by inhalation.

LD50 Inhalation Not available
TCLo Not available

Carcinogenicity Not considered to be a carcinogen.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects None identified.

Section 12. Ecological

12.1 Toxicity No specific environmental hazard.

LC50 Algal Not available
LC50 Crustacea Not available
LC50 Fish Not available

12.2 Persistence and degradability No data available.

12.3 Bioaccumulative potential No data available.12.4 Mobility in soil No data available.

12.5 Results of PBT & vPvB Assessment not required. assessment

12.6 Other adverse effects None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods Flush to drain.

Contaminated Packaging Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number Non-restricted14.2 Proper Shipping Name Non-restricted

14.3 Transport classes

UN classification None Subsidiary hazard(s) None Transport category None

ADR Hazard ID Non-restricted Tunnel Restriction Code Non-restricted

14.4 Packing Group None

14.5 Environment hazards See section 12.

14.6 Special precautions for No special precautions required.

user

14.7 Transport in bulk Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Not classified as hazardous under Classification, Labelling & Packaging of Substances & Mixtures Regulations (1272/2008/CE).

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 08 March 2021

Reviewed by chemist: 08 March 2021

Printed date: 16 August 2023

2710

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.2 Revision date: 16 April 2021
Date printed: 16 August 2023

Section 1. Identification

1.1 Product Identifier 2710

Product Name TYTRONICS ALUMINIUM/COLOUR REAGENT PART A-LO RANGE

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the

annual tonnage does not require a registration or the registration is envisaged for a

later date.

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Skin sensitization, category 1 H317: May cause an allergic skin reaction. Carcinogenicity, category 2 H351: Suspected of causing cancer.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Warning

Hazard Pictograms





Hazard Statements Suspected of causing cancer. May cause an allergic skin reaction.

Precautionary Statements

Obtain special instructions before use. Avoid breathing dust / fume / gas / mist / vapours / spray. Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If skin irritation

occurs: Get medical advice/attention.

Section 3. Composition

3.2 Mixtures

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Hydroxylamine hydrochloride	5470-11-1	226-798-2		1.6%	Met. Corr. 1,Acute Tox. 4 (O),Skin Irrit. 2,Acute Tox. 4 (D),Eye Irrit. 2,Skin Sens. 1,Carc. 2,STOT RE 2,Aquatic Acute 1
Hydrochloric acid	7647-01-0	231-595-7	01-2119484862-27-XXXX	<1%	Skin Corr. 1A,STOT SE 3 (I)

Section 4. First Aid

4.1 Description of first aid measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. Unless contact has been

slight OBTAIN MEDICAL ATTENTION

Skin Wash off skin thoroughly with water. If irritation persists or there is any sign of skin damage, seek IMMEDIATE

MEDICAL ASSISTĂNČE

Inhalation Remove from exposure.

Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION. Ingestion

Personal protection for first Wear protective gloves / eye protection.

aiders

4.2 Most important symptoms and effects, both acute & 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. Fire Fighting

5.1 Extinguishing media

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards Presents no specific fire danger.

5.3 Advice for firefighters

Advice for firefighters Consider all other materials in the vicinity.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it

is safe to do so.

6.2 Environmental precautions

Enviromental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local

Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with Major Spillage

copious amounts of water.

Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

No specific precautions.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Hydroxylamine hydrochloride	5470-11-1	1.6%	-	-	-	-
Hydrochloric acid	7647-01-0	<1%	1.0 ppm	2.0 mg/m-3	5.0 ppm	8.0 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection Presents no significant inhalation health hazard.

Hand Protection Use nitrile gloves or PVC gauntlets.

Skin Protection If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Clear colourless liquid. Odour No specific odour. 1 @ 20°C pН **Boiling Point** Aqueous solution Melting Point Not applicable Flash Point Not applicable Upper Flammable Limit Not applicable Lower Flammable Limit Not applicable Auto Ignition Not applicable **Explosive Properties** No. Oxidising Properties No.

Vapour Pressure Not applicable Relative Density 1.0000

Water Solubility Completely soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

10.3 Possibility of hazardous No data available.

reactions

10.4 Conditions to Avoid No specific conditions.

10.5 Incompatable Materials Alkalis.

0.6 Hazardous Decomposition May produce hazardous fumes if involved in a fire.

Products

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes The liquid will cause eye irritation, and may cause burns if contact is prolonged.

Skin The liquid is irritating to the skin. May cause burns on prolonged contact. May cause skin sensitisation.

LD50 Skin Not available

Ingestion Ingestion will cause gastrointestinal irritation.

LD50 Oral Not available

Inhalation Presents no significant health hazard by inhalation.

LD50 Inhalation Not available
TCLo Not available

Carcinogenicity Suspected of causing cancer.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects None identified.

Section 12. Ecological

12.1 Toxicity Slightly toxic to aquatic species but is unlikely to bioaccumulate.

LC50 Algal Not available
LC50 Crustacea Not available
LC50 Fish Not available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential No data available.12.4 Mobility in soil No data available.

12.5 Results of PBT & vPvB

assessment

Assessment not required.

12.6 Other adverse effects None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods Flush to drain.

Section 14. Transport Information

14.1 UN Number Non-restricted Non-restricted 14.2 Proper Shipping Name

14.3 Transport classes

UN classification None Subsidiary hazard(s) None Transport category None

ADR Hazard ID Non-restricted **Tunnel Restriction Code** Non-restricted

14.4 Packing Group None

14.5 Environment hazards See section 12.

14.6 Special precautions for

No special precautions required.

14.7 Transport in bulk Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin sensitization, category 1; Carcinogenicity, category 2

Signal word Warning

Hazard Pictograms





Hazard Statements

Suspected of causing cancer. May cause an allergic skin reaction.

Precautionary Statements P201, P261, P280, P264, P305+P351+P338, P332+P313

Obtain special instructions before use. Avoid breathing dust / fume / gas / mist / vapours / spray. Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If skin irritation occurs: Get medical advice/attention.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.2 (Supercedes revision 1.1)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 16 August 2023

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 08 March 2021 Date printed: 16 August 2023

Section 1. Identification

1.1 Product Identifier 2711

Product Name TYTRONICS ALUMINIUM/COLOUR REAGENT PART B-LO RANGE

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the

annual tonnage does not require a registration or the registration is envisaged for a

later date.

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Not classified as hazardous.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Not classified as hazardous.

Section 3. Composition

3.2 Mixtures

No hazardous components.

Section 4. First Aid

4.1 Description of first aid measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists

OBTAIN MEDICAL ATTENTION.

Skin Wash off skin thoroughly with water.

Inhalation Remove from exposure.

Ingestion Wash out the patients mouth thoroughly with water.

Personal protection for first Wear protective gloves / eye protection.

aiders

4.2 Most important symptoms and effects, both acute & 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. Fire Fighting

5.1 Extinguishing media

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards Presents no specific fire danger.

5.3 Advice for firefighters

Advice for firefighters Consider all other materials in the vicinity.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Presents no major hazards.

6.2 Environmental precautions

Environmental Presents no major environmental hazard.

6.3 Methods and material for containment and cleaning up

Major Spillage Wash area down with copious amounts of water.

Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

No specific precautions.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Exposure data source(s) No hazardous components.

8.2 Exposure controls

Respiratory Protection Presents no significant inhalation health hazard.

Hand Protection Use nitrile gloves or PVC gauntlets.

Skin Protection If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Clear orange solution. Appearance No specific odour. Odour 3 @ 20°C pН **Boiling Point** Aqueous solution Melting Point Not applicable Flash Point Not applicable Upper Flammable Limit Not applicable Not applicable Lower Flammable Limit Auto Ignition Not applicable

Explosive Properties No. Oxidising Properties No.

Vapour Pressure Not applicable Relative Density 1.0000

Water Solubility Completely soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

10.3 Possibility of hazardous

reactions

No data available.

10.4 Conditions to Avoid No specific conditions.

10.5 Incompatable Materials No specific materials to avoid.

10.6 Hazardous Decomposition None.

Products

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes The liquid may be mildly irritating to the eye.

Skin Presents no significant hazard by skin contact.

LD50 Skin Not available

Ingestion Presents no significant hazard by ingestion.

LD50 Oral Not available

Inhalation Presents no significant health hazard by inhalation.

LD50 Inhalation Not available TCLo Not available

Carcinogenicity Not considered to be a carcinogen.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects None identified.

Section 12. Ecological

12.1 Toxicity No specific environmental hazard.

LC50 Algal Not available
LC50 Crustacea Not available
LC50 Fish Not available

12.2 Persistence and degradability No data available.

12.3 Bioaccumulative potential No data available.12.4 Mobility in soil No data available.

12.5 Results of PBT & vPvB Assessment not required. assessment

12.6 Other adverse effects None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods Flush to drain.

Section 14. Transport Information

14.1 UN Number Non-restricted14.2 Proper Shipping Name Non-restricted

14.3 Transport classes

UN classification None Subsidiary hazard(s) None Transport category None

ADR Hazard ID Non-restricted Tunnel Restriction Code Non-restricted

14.4 Packing Group None

14.5 Environment hazards See section 12.

14.6 Special precautions for No special precautions required.

user

14.7 Transport in bulk Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Not classified as hazardous under Classification, Labelling & Packaging of Substances & Mixtures Regulations (1272/2008/CE).

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 08 March 2021

Reviewed by chemist: 08 March 2021

Printed date: 16 August 2023

2732

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 16 April 2021 Date printed: 16 August 2023

Section 1. Identification

1.1 Product Identifier 2732

Product Name TYTRONICS FPA-800 ALUMINIUM MONITOR BUFFER REAGENT

CAS Number Mixture

REACH Registration No A registration number is not available as the substance or its uses are exempt, the

annual tonnage does not require a registration or the registration is envisaged for a

later date.

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Skin corrosion/irritation, category 2 Serious eye damage/irritation, category 2 H315: Causes skin irritation.

H319: Causes serious eye irritation.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Warning

Hazard Pictograms



Hazard Statements Causes serious eye irritation. Causes skin irritation.

Precautionary Statements

Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention.

Section 3. Composition

3.2 Mixtures

Component	nent CAS No. EEC No.		REACH No. Conc w/w		CLP Classification (1272/2008/CE)	
Sodium hydroxide	1310-73-2	215-185-5	01-2119457892-27-XXXX	1.1%	Skin Corr. 1A	

Section 4. First Aid

4.1 Description of first aid measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL

ATTENTION URGENTLY.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If

irritation persists or there is any sign of skin damage, seek IMMEDIATE MEDICAL ASSISTANCE

Inhalation Remove from exposure.

Ingestion If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION

URGENTLY.

Personal protection for first Wear protective gloves / eye protection.

aiders

4.2 Most important symptoms and effects, both acute & 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. Fire Fighting

5.1 Extinguishing media

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards Presents no specific fire danger.

5.3 Advice for firefighters

Advice for firefighters Consider all other materials in the vicinity.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow

other people to enter area. Do not allow general use of area until it is safe to do so.

6.2 Environmental precautions

Environmental Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental

Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain spill with inert material. Neutralise with 5M hydrochloric acid. Wash area down with copious amounts of

water.

Minor Spillage Wash area down with copious amounts of water.

6.4 Reference to other sections

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place protected against moisture and water. Keep well separated from acids, metals, explosives, organic peroxides and ignitable materials.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

l	Component	CAS No	Concentration	Workplace Exposure Limits			
				Long Term (8hr TWA)		Short Term 15min period)	
1	Sodium hydroxide	1310-73-2	1.1%	-	-	-	2.0 mg/m-3

IOELV: Indicative Occupational Exposure Limit Value. Exposure data source(s)

8.2 Exposure controls

Respiratory Protection In cases where a spray or mist may be formed, use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing

apparatus.

Hand Protection Use nitrile gloves or PVC gauntlets.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection If skin contact or contamination of clothing is likely, protective clothing must be worn. Wear PVC oversuit.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Clear colourless liquid. Appearance Odour No specific odour. 13 @ 20°C pΗ **Boiling Point** Aqueous solution Melting Point Not applicable Flash Point Not applicable Upper Flammable Limit Not applicable Lower Flammable Limit Not applicable Auto Ignition Not applicable

Explosive Properties No. Oxidising Properties No.

Vapour Pressure Not applicable Relative Density 1.0700

Water Solubility Completely soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

10.3 Possibility of hazardous No data available.

reactions

10.4 Conditions to Avoid No specific conditions.

10.5 Incompatable Materials Acids. Reacts with aluminium and zinc to produce extremely flammable hydrogen gas.

0.6 Hazardous Decomposition None unusual.

Products

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes Causes serious eye irritation.

Skin The liquid will be irritating to the skin.

LD50 Skin Not available

Ingestion Ingestion of large amounts may cause nausea, abdominal discomfort, vomiting and diarrhoea.

LD50 Oral Not available

Inhalation Presents no significant health hazard by inhalation.

LD50 Inhalation Not available TCLo Not available

Carcinogenicity Not considered to be a carcinogen.

Mutagenicity Not considered to be a mutagen.

Reproductive Effects None identified.

Section 12. Ecological

12.1 Toxicity Small amounts present no specific environmental hazard. Neutralised material presents no specific environmental

hazard.

LC50 Algal Not available
LC50 Crustacea Not available
LC50 Fish Not available

12.2 Persistence and

degradability

No data available.

12.3 Bioaccumulative potential No data available.12.4 Mobility in soil No data available.

12.5 Results of PBT & vPvB

assessment

Assessment not required.

12.6 Other adverse effects None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods Do not dispose of as domestic waste.

Contaminated Packaging Clean out with a weak hydrochloric acid solution then wash out thoroughly with water.

Section 14. Transport Information

14.1 UN Number Non-restricted14.2 Proper Shipping Name Non-restricted

14.3 Transport classes

UN classification None Subsidiary hazard(s) None Transport category None

ADR Hazard ID Non-restricted
Tunnel Restriction Code Non-restricted

14.4 Packing Group None

14.5 Environment hazards See section 12.

14.6 Special precautions for No special precautions required.

user

14.7 Transport in bulk Not transported in bulk.

Section 15. Regulatory Information

$15.1\ Safety, health\ and\ environment\ regulations\ specific\ for\ subtance/mixture.$

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2

Signal word Warning

Hazard Pictograms



Hazard Statements H319, H315

Causes serious eye irritation. Causes skin irritation.

Precautionary Statements P264, P280, P305+P351+P338, P337+P313, P332+P313

Wash thoroughly after handling. Wear protective gloves / protective clothing / eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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