



# SAFETY DATA SHEET

## ALUMINIUM SAFE MACHINE WARE WASH

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name ALUMINIUM SAFE MACHINE WARE WASH  
Internal Id C847

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

Identified uses Cleaning agent.

#### 1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS  
RAWDON ROAD  
MOIRA  
SWADLINCOTE  
DERBYSHIRE  
DE12 6DA  
TEL: +44 (0)1283 221044  
EMERGENCY: +44 (0) 777 8505 330  
FAX: +44 (0)1283 225731  
sales@arrowchem.com

#### 1.4. Emergency telephone number

+44 (0) 777 8505 330

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

Physical and Chemical Hazards Met. Corr. 1 - H290  
Human health Skin Corr. 1A - H314  
Environment Not classified.

##### Classification (1999/45/EEC)

C;R35.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

#### 2.2. Label elements

Contains SODIUM SILICATE

##### Detergent Labelling:

5 - < 15% Phosphonates  
< 5% amphoteric surfactants  
EDTA and salts thereof

Label In Accordance With (EC) No. 1272/2008

# ALUMINIUM SAFE MACHINE WARE WASH



<b>Signal Word</b>	Danger	
<b>Hazard Statements</b>	H290 H314	May be corrosive to metals. Causes severe skin burns and eye damage.
<b>Precautionary Statements</b>	P280 P303+361+353 P305+351+338 P309+311 P501	Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. Dispose of contents/container in accordance with local regulations.

## 2.3. Other hazards

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2. Mixtures

<b>TETRASODIUM 1-HYDROXYETHYLIDENE-1,1-DIPHOSPHONATE</b>		<b>10-30%</b>
<b>CAS-No.: 3994-83-0</b>	<b>EC No.: 223-267-7</b>	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38.	
<b>SODIUM SILICATE</b>		<b>10-30%</b>
<b>CAS-No.: 1344-09-8</b>	<b>EC No.: 215-687-4</b>	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Dam. 1 - H318	Classification (67/548/EEC) Xi;R38,R41.	
<b>DISODIUM METASILICATE</b>		<b>5-10%</b>
<b>CAS-No.: 6834-92-0</b>	<b>EC No.: 229-912-9</b>	<b>Registration Number: 01-2119449811-37</b>
Classification (EC 1272/2008) Skin Corr. 1B - H314 STOT SE 3 - H335	Classification (67/548/EEC) C;R34 Xi;R37	
<b>TETRASODIUM GLUTAMATE</b>		<b>1-5%</b>
<b>CAS-No.: 51981-21-6</b>	<b>EC No.: 257-573-7</b>	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC) Xi;R36/38.	

# ALUMINIUM SAFE MACHINE WARE WASH

ALKYL IMINOACID SALT 50% SOLN		1-5%
CAS-No.: 94441-92-6	EC No.: 305-318-6	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Xi;R36/38.	
TETRASODIUM EDTA		1-5%
CAS-No.: 64-02-8	EC No.: 200-573-9	
Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Dam. 1 - H318	Classification (67/548/EEC) Xn;R22. Xi;R41.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### **Inhalation**

Move into fresh air and keep at rest.

#### **Ingestion**

Rinse mouth thoroughly. Do not induce vomiting. Get medical attention.

#### **Skin contact**

Wash skin thoroughly with soap and water. Remove contaminated clothing. Get medical attention promptly if symptoms occur after washing.

#### **Eye contact**

Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse.

### 4.2. Most important symptoms and effects, both acute and delayed

#### **General information**

Seek medical attention for all burns, regardless how minor they may seem.

#### **Inhalation**

Upper respiratory irritation.

#### **Ingestion**

May cause chemical burns in mouth and throat.

#### **Skin contact**

Burning pain and severe corrosive skin damage.

#### **Eye contact**

Extreme irritation of eyes and mucous membranes, including burning and tearing.

### 4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### **Extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

### 5.2. Special hazards arising from the substance or mixture

#### **Hazardous combustion products**

Fire or high temperatures create: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrous gases (NO<sub>x</sub>).

### 5.3. Advice for firefighters

# ALUMINIUM SAFE MACHINE WARE WASH

## Special Fire Fighting Procedures

No specific fire fighting procedure given.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use protective gloves, goggles and suitable protective clothing.

### 6.2. Environmental precautions

Do not discharge onto the ground or into water courses.

### 6.3. Methods and material for containment and cleaning up

Absorb with inert, damp, non-combustible material, then flush area with water.

### 6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Avoid spilling, skin and eye contact.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in closed original container at temperatures between 0°C and 40°C.

#### Storage Class

Corrosive storage.

### 7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
SODIUM SILICATE	WEL				2 mg/m <sup>3</sup>	

WEL = Workplace Exposure Limit.

#### Ingredient Comments

WEL = Workplace Exposure Limits

#### DISODIUM METASILICATE (CAS: 6834-92-0)

##### DNEL

Industry	Dermal	Long Term	1.49	mg/kg/day
Industry	Inhalation.	Long Term	6.22	mg/m <sup>3</sup>
Consumer	Dermal	Long Term	0.74	mg/kg/day
Consumer	Inhalation.	Long Term	1.55	mg/m <sup>3</sup>
Consumer	Oral	Long Term	0.74	

### 8.2. Exposure controls

#### Protective equipment



#### Hand protection

Protective gloves must be used if there is a risk of direct contact or splash.

#### Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

# ALUMINIUM SAFE MACHINE WARE WASH

## Hygiene measures

Wash promptly if skin becomes contaminated. Wash contaminated clothing before reuse.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Straw.
Odour	Characteristic.
Solubility	Completely soluble in water
Relative density	1.22 @ 20°C
pH-Value, Conc. Solution	>11.5

### 9.2. Other information

Not determined.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Exothermic reaction with: Acids.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

Not determined.

### 10.4. Conditions to avoid

The solution is strongly alkaline and reacts with strong acids with heat generation.

### 10.5. Incompatible materials

#### Materials To Avoid

Strong acids.

### 10.6. Hazardous decomposition products

Fire or high temperatures create: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrous gases (NO<sub>x</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Skin Corrosion/Irritation:

Extreme pH.

≥ 11.5

Corrosive to skin.

#### Serious eye damage/irritation:

Skin corrosive; corrosivity to eyes is assumed. No testing is needed.

#### Inhalation

Upper respiratory irritation.

#### Ingestion

May cause discomfort if swallowed.

#### Skin contact

Causes severe burns.

#### Eye contact

Extreme irritation of eyes and mucous membranes, including burning and tearing.

# ALUMINIUM SAFE MACHINE WARE WASH

## Toxicological information on ingredients.

### DISODIUM METASILICATE (CAS: 6834-92-0)

#### Acute toxicity:

##### **Acute Toxicity (Oral LD50)**

1280 mg/kg Rat

### SODIUM SILICATE (CAS: 1344-09-8)

#### Acute toxicity:

##### **Acute Toxicity (Oral LD50)**

> 1300 mg/kg Rat

### TETRASODIUM EDTA (CAS: 64-02-8)

#### Acute toxicity:

##### **Acute Toxicity (Oral LD50)**

3030 mg/kg Rat

##### **Acute Toxicity (Dermal LD50)**

> 5000 mg/kg Rabbit

##### **Acute Toxicity (Inhalation LC50)**

4.14 mg/l (dust/mist) Rat 4 hours

### TETRASODIUM GLUTAMATE (CAS: 51981-21-6)

##### **Toxic Dose 1 - LD 50**

>2000 mg/kg (oral rat)

## SECTION 12: ECOLOGICAL INFORMATION

### **Ecotoxicity**

The product is not expected to be hazardous to the environment.

### **12.1. Toxicity**

#### **Acute Toxicity - Fish**

Not determined.

#### Ecological information on ingredients.

### DISODIUM METASILICATE (CAS: 6834-92-0)

#### **Acute Toxicity - Fish**

LC50 96 hours 180 mg/l Brachydanio rerio (Zebra Fish)

#### **Acute Toxicity - Aquatic Invertebrates**

EC50 48 hours 1700 mg/l Daphnia magna

#### **Acute Toxicity - Aquatic Plants**

EC50 72 hours 207 mg/l Scenedesmus subspicatus

### TETRASODIUM EDTA (CAS: 64-02-8)

#### **LC 50, 96 Hrs, Fish mg/l**

>100

### TETRASODIUM GLUTAMATE (CAS: 51981-21-6)

#### **Acute Toxicity - Fish**

LC50 96 hours > 100 mg/l Onchorhynchus mykiss (Rainbow trout)

#### **Acute Toxicity - Aquatic Invertebrates**

EC50 48 hours > 100 mg/l Daphnia magna

### **12.2. Persistence and degradability**

#### **Degradability**

The product is expected to be biodegradable.

### **12.3. Bioaccumulative potential**

#### **Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating.

### **12.4. Mobility in soil**

# ALUMINIUM SAFE MACHINE WARE WASH

## Mobility:

The product is soluble in water.

## 12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

## 12.6. Other adverse effects

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN number

UN No. (ADR/RID/ADN)	1760
UN No. (IMDG)	1760
UN No. (ICAO)	1760

### 14.2. UN proper shipping name

Proper Shipping Name                      CORROSIVE LIQUID, N.O.S. (sodium silicate)

### 14.3. Transport hazard class(es)

ADR/RID/ADN Class	8
ADR/RID/ADN Class	Class 8: Corrosive substances.
IMDG Class	8
ICAO Class/Division	8
Transport Labels	



### 14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

### 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

### 14.6. Special precautions for user

Tunnel Restriction Code                      (E)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

# ALUMINIUM SAFE MACHINE WARE WASH

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **Uk Regulatory References**

Chemicals (Hazard Information & Packaging) Regulations.

#### **Statutory Instruments**

Control of Substances Hazardous to Health.

#### **Guidance Notes**

Workplace Exposure Limits EH40.

#### **EU Legislation**

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

### 15.2. Chemical Safety Assessment

## SECTION 16: OTHER INFORMATION

#### **General information**

Only trained personnel should use this material.

**Revision Date** 16/07/2013

**Revision** 2.0

**Supersedes date** 27/04/2012

#### **Risk Phrases In Full**

R34 Causes burns.  
R35 Causes severe burns.  
R22 Harmful if swallowed.  
R36/38 Irritating to eyes and skin.  
R37 Irritating to respiratory system.  
R38 Irritating to skin.  
R41 Risk of serious damage to eyes.

#### **Hazard Statements In Full**

H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H302 Harmful if swallowed.  
H290 May be corrosive to metals.  
H335 May cause respiratory irritation.

#### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.