# SAFETY DATA SHEET SILVER MAINTENANCE SOLUTION

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

1.1. Product identifier

Product name SILVER MAINTENANCE SOLUTION

Product number

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

Identified uses Metal Cleaning agent

1.3. Details of the supplier of the safety data sheet

Supplier RKM (NUSHINE) LIMITED

> 18 THE GREENWAY **TYLERS GREEN** BUCKS. HP10 8BX

01494 816711

Contact person N. Bhattacharya

### 1.4. Emergency telephone number

### SECTION 2: Hazards identification

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

Classification

Not Classified Physical hazards Health hazards Not Classified

**Environmental hazards** Aquatic Chronic 3 - H412

Human health May irritate eyes.

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

2.2. Label elements

**Hazard statements** H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements** P273 Avoid release to the environment.

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

### 2.3. Other hazards

### SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

2-(2 BUTOXY ETHOXYETHANOL) 1-5%

CAS number: 112-34-5 EC number: 203-961-6

Classification Classification (67/548/EEC or 1999/45/EC)

Eye Irrit. 2 - H319 Xi;R36.

### SILVER MAINTENANCE SOLUTION

LONGCHAIN ALCOHOL ETHOXYLATE

<1%

CAS number: -

Classification Classification (67/548/EEC or 1999/45/EC)

Not Classified Xn;R22. Xi;R41.

SULPHAMIC ACID <1%

CAS number: 5329-14-6 EC number: 226-218-8

Classification Classification (67/548/EEC or 1999/45/EC)

Skin Irrit. 2 - H315 Xi:R36/38 R52/53

Eye Irrit. 2 - H319 Aquatic Chronic 3 - H412

SILVER SALT COMPOUND <1%

Classification Classification (67/548/EEC or 1999/45/EC)

Eye Dam. 1 - H318 Xi;R36.

Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

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** Unlikely to occur, no fumes emitted

**Ingestion** Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse

mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any

discomfort continues.

Skin contact Remove affected person from source of contamination. Get medical attention if irritation

persists after washing.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15

minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort

continues.

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

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

**Inhalation** Unlikely to occur

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Prolonged skin contact may cause redness and irritation.

**Eye contact** Irritating to eyes. Symptoms following overexposure may include the following: Redness.

Pain.

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

### SILVER MAINTENANCE SOLUTION

### SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

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

Hazardous combustion

None at ambient temperatures.

products

### 5.3. Advice for firefighters

Protective actions during

firefighting

No specific firefighting precautions known.

### SECTION 6: Accidental release measures

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

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

### 6.2. Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground.

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

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into

containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering

drains, sewers or watercourses.

#### 6.4. Reference to other sections

### SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid spilling. Avoid contact with skin and eyes.

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

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in

the original container.

### 7.3. Specific end use(s)

#### SECTION 8: Exposure Controls/personal protection

## 8.1. Control parameters

### Occupational exposure limits

### 2-(2 BUTOXY ETHOXYETHANOL)

Long-term exposure limit (8-hour TWA): WEL 10 ppm 67.5 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 15 ppm 101.2 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

Ingredient comments OES = Occupational Exposure Standard. MEL = Maximum Exposure Limit.

### SILVER SALT COMPOUND (CAS: 534-16-7)

Ingredient comments WEL = Workplace Exposure Limits

Biological limit values 0.01, 0.01, 0.01

### SILVER MAINTENANCE SOLUTION

### 8.2. Exposure controls

## Protective equipment





Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

**Eye/face protection** Eyewear complying with an approved standard should be worn if a risk assessment indicates

eye contact is possible. The following protection should be worn: Chemical splash goggles or

face shield.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if

a risk assessment indicates skin contact is possible.

Other skin and body

protection

Wear appropriate clothing to prevent any possibility of skin contact.

**Hygiene measures**Do not smoke in work area. Wash hands at the end of each work shift and before eating,

smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of

skin. When using do not eat, drink or smoke.

### **SECTION 9: Physical and Chemical Properties**

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

Appearance Opaque liquid. Liquid.

Colour Brown.

Odour Characteristic.

**Relative density** 1.090 - 1.110 @ @ 20°C

9.2. Other information

### SECTION 10: Stability and reactivity

10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

10.2. Chemical stability

**Stability** Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous

None Known

reactions

10.4. Conditions to avoid

**Conditions to avoid** Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

products

## SECTION 11: Toxicological information

### SILVER MAINTENANCE SOLUTION

### 11.1. Information on toxicological effects

**Toxicological effects** No information available.

Acute toxicity - dermal

Acute toxicity dermal (LD₅o

mg/kg)

1,000.0

Acute and chronic health

hazards

No specific health hazards known.

## SECTION 12: Ecological Information

**Ecotoxicity** Not regarded as dangerous for the environment.

12.1. Toxicity

**Toxicity** Not considered toxic to fish.

Acute toxicity - fish LC<sub>50</sub>, 96 hours: >200 mg/l, Fish

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: >200 mg/l, Daphnia magna

Acute toxicity - aquatic plants IC<sub>50</sub>, 72 hours: >200 mg/l, Algae

### 12.2. Persistence and degradability

Persistence and degradability The product contains mainly inorganic substances which are not biodegradable. The other

substances in the product are expected to be readily biodegradable.

### 12.3. Bioaccumulative potential

Bioaccumulative potential Not expected to bioaccumulate

12.4. Mobility in soil

**Mobility** The product is soluble in water.

### 12.5. Results of PBT and vPvB assessment

### 12.6. Other adverse effects

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be

considered.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

### **SECTION 14: Transport information**

General Not hazardous for road transport

Rail transport notes Not classified.

Sea transport notes Not classified.

Air transport notes Not classified.

14.1. UN number

UN No. (ADR/RID) 0

### SILVER MAINTENANCE SOLUTION

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

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

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009

No. 716).

Guidance Workplace Exposure Limits EH40.

Introduction to Local Exhaust Ventilation HS(G)37.

CHIP for everyone HSG228.

Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

**SECTION 16: Other information** 

General information This information is given in good faith and is based upon current available data. The suitability

of this product for any particular use is not suggested. The user must determine if the product is correct for any particular application. This document is not a specification. Conforms to

1907/2006/EC

Revision date 02/09/2015

Revision 02

SDS number 609RK

Risk phrases in full Not classified.

R22 Harmful if swallowed. R36 Irritating to eyes.

R36/38 Irritating to eyes and skin. R41 Risk of serious damage to eyes.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

Hazard statements in full H315 Causes skin irritation.

H318 Causes serious eye damage. H319 Causes serious eye irritation. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.