

**PRODUCT INFORMATION SHEET**

**MACHINE DE-SCALER**

**PRODUCT INFORMATION:**

A concentrated acid based cleaner & de-scaler designed to remove lime scale, rust, carbon & dirt from kettles, boilers, coffee machines, dish washers & washing machines. Will also remove corrosion from aluminium & brighten copper, stainless steel & zinc. Suitable for use in food processing environments

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**ADVANTAGES:**

EXCELLENT RUST & Machine De-scaler contains a high concentration of phosphoric acid

SCALE REMOVER: which quickly removes lime scale & rust leaving a clean metal surface.

REMOVES GREASE: Machine De-scaler contains a penetrate which also emulsifies & washes away any traces of light grease & oil which would interfere with its de-scaling ability.

LEAVES PAINTABLE Machine De-scaler leaves a temporary protective film when the

PROTECTED SURFACE: metal to be cleaned is not rinsed. This film is an excellent base for most primers & paints providing a firm base for maximum adhesion.

BRIGHTENS TARNISHED Machine De-scaler cleans & brightens aluminium, zinc, copper etc.

ALUMINIUM:

REMOVES SCALE: Machine De-scaler dissolves hard water scale & hydrolyses protein scale.

BIODEGRADABLE &: Fully biodegradable & 100% soluble in water.

WATER SOLUBLE:

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**DIRECTIONS FOR USE:**

Dilution: Apply neat & further dilute at 50mls per litre of water. For Kettles & Boilers – Coat the interior of the vessel with the liquid. Allow contact time until all lime scale is dissolved & rinse thoroughly. For Dish Washers & Washing Machines – Refer to manufacturer’s guidelines. Ensure machine is drained, no other detergent is applied & machine is empty. Apply up to 100mls of Machine De-Scaler to the machine & run cycle. Run cycle a second time to ensure the product is completely rinsed. For manual cleaning or pre-painting of metals - Apply with a roller or brush, or sprayer. Parts may be immersed in a bath of solution leave for 20 minutes, remove and wash off. Always rinse well after use. Do not mix with other cleaners particularly bleaches.

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**PACKAGING:**

All our plastic drums are high molecular weight; high-density polyethylene designed to bring the product to the customer in perfect conditions.

Size: 1Lt Drums, 5Lt Drums, 20Lt Drums

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**QUALITY ASSURANCE:**

This product is manufactured in Ireland to ISO 9001 quality standards & conforms to R.E.A.C.H & CLP regulations. Shelf life: Not less than 3 years.

**Safety Data Sheet**

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Date of issue: 01.08.21 SDS Version No. 5

**PRODUCT NAME: MACHINE DE-SCALER**

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

1.1. Product identifier

Product Name MACHINE DE-SCALER

Product No. KR 322

Other means of Identification UFI: ENV0-U0N8-H00V-TRNH

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

Identified uses: Cleaning agent – For professional use only

1.3. Details of the supplier of the safety data sheet

Supplier Roschem Products Ltd

 Windmill Road, Elphin, Co Roscommon, Ireland

 Tel: +353 (0)71 9635375 Fax: +353 (0)71 9635414

 Email: info@roschemproducts.com

1.4. Emergency Contact: National Poisons Information Centre, Beaumont Hospital, Beaumont Road, Dublin 9. Tel: +353(01)8092566

 **SECTION 2: HAZARDS IDENTIFICATION**

2.1. Classification of the substance or mixture

Classification: Regulation (EC) No 1272/2008: H314

Human health: Causes severe skin burns and eye damage.

Environment: This product is Readily Biodegradable and not expected to be hazardous to the environment.

2.2. Label elements

Detergent Labelling: Contains: Phosphoric acid, dipropylene glycol methyl ether, non-ionic surfactants

Labelling 

 DANGER

Hazard Statements H314 Causes severe skin burns and eye damage.

Precautionary

Statements P260 Do not breathe mist/vapours/spray

P262 Do not get in eyes, on skin or on clothing

P264 Wash hands thoroughly after handling

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

 P301 & 310 IF SWALLOWED: Rinse out mouth immediately with water. Immediately call a poison center or doctor/physician.

P302 IF ON SKIN: Remove contaminated clothing & rinse skin

 thoroughly with soap & water. Obtain medical attention if irritation persists

P304 IF INHALED: Remove immediately from source to fresh air. Obtain medical attention if any discomfort continues.

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P305 & 310 IF IN EYES: Flush eyes with water, remove contact lenses if

present & continue rinsing. Immediately call a poison center or doctor/physician.

2.3. Other hazards: N/A

 **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

3.2. Mixtures

|  |
| --- |
| PHOSPHORIC ACID (Food grade) 30-50%CAS-No.: 7664-38-2 EC No.: 231-633-2REACH registration number: 01-2119485924-24-XXXX |
| Classification (EC 1272/2008) Skin Corr. 1B - H314  |

|  |
| --- |
| ALCOHOL ETHOXYLATE 0-3%CAS-No.: 68439-46-3 EC No.: REACH Registration number: Exempt as polymer.  |
| Classification (EC 1272/2008) Acute Tox. 4 - H302 Eye Dam. 1 - H318  |

|  |
| --- |
| DIPROPYLENE GLYCOL MONOMETHYL ETHER 5-10%CAS-No.: 34590-94-8 EC No.: 252-104-2REACH Registration number: 01-2119450011-60-xxxx |
| Classification (EC 1272/2008) Not Classified  |

A Full Text for all Hazard Statements are Displayed in Section 16

**SECTION 4: FIRST AID MEASURES**

4.1. Description of first aid measures

Inhalation: Remove immediately from source to fresh air. Obtain medical attention.

Skin Contact: Remove contaminated clothing & rinse skin thoroughly with soap & water.

Eye Contact: Flush eyes with water immediately. Obtain medical attention.

Ingestion: Rinse out mouth immediately with water. Obtain medical attention.

Protection of

first aider: Avoid contact with skin and eyes (see Section 8.)

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

Inhalation: Spray mists may cause respiratory tract irritation. Prolonged inhalation may cause damage to the upper respiratory tract & cause irritation of the mucous membranes of the nose.

Ingestion: Ingestion causes severe damage to the mucous membranes or deeper tissue of the mouth, throat, oesophagus and stomach.

Skin contact: Causes severe burns.

Eye contact: Causes severe burns. Risk of serious damage to eyes

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

The severity of the symptoms described will vary depending on the concentration and the length of exposure.

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**SECTION 5: FIRE FIGHTING MEASURES**

5.1 Suitable Extinguishing Media: Small Fire: Carbon Dioxide, dry chemical powder, alcohol resistant foam or water fog.

 Large Fire: Alcohol resistant foam or water fog.

5.2 Unsuitable: N/A

5.3 Specific Hazards: Evaporates on heating to liberate highly irritating mists of phosphoric acid. May decompose in a fire to generate irritating fumes of phosphorous pentoxide.

5.4 Special Equipment for the

 protection of Fire Fighters: May generate toxic & explosive fumes in a fire, therefore fire fighters should wear self-contained breathing apparatus and full body protective clothing.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1 Personal Precautions: Avoid contact with skin and eyes (see Section 8.)

6.2 Environmental Precautions: If size of spillage warrants and has contaminated water courses, drains or vegetation - advise appropriate authorities.

6.3 Methods for Cleaning up: Small Spills - Flush with water.

 Large Spills - Contain and collect spillage and absorb on to sand.

**SECTION 7: HANDLING AND STORAGE**

7.1 Handling

Technical Measures: No special measures required.

Safe Handling Advice: Avoid contact with eyes and skin. Comply with instructions for use.

7.2 Storage

Technical Measures: No special measures required.

Storage Conditions: Store in a cool dry place.

Incompatible Products: Avoid Extreme Temperatures. Alkalis, Strong Oxidizing Agents. Mild steel, cast iron, aluminium, aluminium alloys, brasses, tinned and galvanized materials are all attacked

Packaging: Plastic Drums.

Packaging Materials: Recommended: Plastic Materials, Polyethylene, Polypropylene. Not Suitable - Uncoated Metal Drums.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 Control parameters:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | STD | Occupational Exposure Limit Value (8-hour reference period) ppm mg/m3 | Occupational Exposure Limit Value (15 minute reference period) ppm mg/m3 | Notes |
| PHOSPHORIC ACID | OELV | - | 1 mg/m3 | - | 2 mg/m3 |  |
| Dipropylene glycol methyl ether | OELV | 50 | 308 | - | - | Sk, IOELV |

OELV = Occupational Exposure Limit Value

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8.2 Personal Protection Equipment:

  

 Respiratory Protection: Provide adequate ventilation in areas of confined space.

: Hand Protection: Use Chemical Resistant Gloves to EN Standard 374 Level 1,

Letter Code K. Thickness of glove material: 0.7mm. Breakthrough time (maximum wear duration) >480 mins

 Eye Protection: Use Chemical Goggles or Face Shield to EN Standard 166 Level 3 or higher

 Skin Protection: Wear Plastic Apron EN Standard 13034 Type PB[6] & Face Shield EN Standard 166 Level 3 or higher

8.3 Hygiene Measures: Handle in accordance with good industrial hygiene and

 safety practices.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1. Information on basic physical and chemical properties

1. Physical state: Liquid.
2. Odour / Odour threshold: Chemical
3. Colour: Colourless
4. pH: 1+/-0.5
5. Melting point / freezing point: N/A
6. Initial boiling point & boiling range: N/A
7. Flash point: N/A
8. Evaporation rate: N/A
9. Flammability solid, gas): N/A
10. Upper/lower flammability or explosive limits: N/A
11. Vapour pressure: N/A
12. Vapour density: N/A
13. Relative density: 1.16kg/dm3
14. Solubility(ies): Soluble in Water
15. Partition coefficient: n-octanol/water: N/A
16. Particle characteristics: N/A
17. Auto-ignition temperature: N/A
18. Decomposition temperature: N/A
19. Viscosity: N/A
20. Explosive properties: N/A
21. Oxidising properties: N/A

9.2.1 Additional information

 Physical Hazard Class N/A

 Properties N/A

 Safety Characteristics N/A

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9.2.2 Other Safety Characteristics

 Mechanical Sensitivity N/A

 Acid/Alkaline Reserve N/A

 Conductivity/Redox Potential N/A

**SECTION 10: STABILITY AND REACTIVITY**

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

10.2. Chemical stability: Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions: Hazardous Polymerisation N/A

10.4. Conditions to avoid: Avoid Extreme Temperatures. Avoid contact with alkalis &/or oxidising agents.

10.5. Incompatible materials: Alkalis &/or oxidizing agents

10.6. Hazardous decomposition products: Oxides of Phosphorus and other toxic fumes.

**SECTION 11: TOXICOLOGICAL INFORMATION**

11.1 Information on Hazard Classes as defined in regulation (EC) No 1272/2008 N/A

11.2 Information on other Hazard Classes which related to endocrine disrupting properties as determined by the aforementioned regulations. N/A

11.3. Information on toxicological effects:

Inhalation: Spray mists may cause respiratory tract irritation. Prolonged inhalation may cause damage to the upper respiratory tract & cause irritation of the mucous membranes of the nose.

Ingestion: Ingestion causes severe damage to the mucous membranes or deeper tissue of the mouth, throat, oesophagus and stomach.

Skin contact: Causes severe burns.

Eye contact: Causes severe burns. Risk of serious damage to eyes

11.2. Toxicological information on ingredients:

PHOSPHORIC ACID (CAS: 7664-38-2)

 Toxic Dose 1 - LD 50

 >1530

Acute Toxicity (Dermal LD50)

>2740 mg/kg Rabbit

 REACH dossier information

ALCOHOL ETHOXYLATE (CAS: 68439-46-3)

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

Acute Toxicity (Inhalation LC50)

> 1.6 mg/l (dust/mist) Rat 4 hours

REACH dossier information

DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 20 mL/kg Rat

Acute Toxicity (Inhalation LC50)

> 275 ppm (vapours) Rat 7 hours

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**SECTION 12: ECOLOGICAL INFORMATION**

Eco-toxicity

This product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

12.1. Toxicity

Ecological information on ingredients:

PHOSPHORIC ACID (CAS: 7664-38-2)

Acute Toxicity - Fish

LC50 96 hours 702 μg/L Pimephales promelas (Fat-head Minnow)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 0.67 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 72 hours 8 mg/l Desmodesmus subspicatus

REACH dossier information

ALCOHOL ETHOXYLATE (CAS: 68439-46-3)

Acute Toxicity - Fish

LC50 96 hours 0.59 mg/l Pleuronectes platessa

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 0.14 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 72 hours 0.75 mg/l Selenastrum capricornutum

REACH dossier information

DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)

Acute Toxicity - Fish

LC50 96 hours > 1000 Poecilia reticulata

Acute Toxicity - Aquatic Invertebrates

LC50 48 hours 1919 mg/l

Acute Toxicity - Aquatic Plants

EC50 72 hours > 969 mg/l Selenastrum capricornutum

NOEC 72 hours 969 mg/l Selenastrum capricornutum

REACH dossier information

12.2. Persistence and degradability

Degradability: The surfactant(s) contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Ecological information on ingredients.

PHOSPHORIC ACID (CAS: 7664-38-2)

 Degradability

 This product mainly consists of inorganic compounds which are not biodegradable. The remaining compounds of the product are expected to be easily biodegradable

ALCOHOL ETHOXYLATE (CAS: 68439-46-3)

Biodegradation. Activated sludge Degradation (72%) 28 days

REACH dossier information

The substance is readily biodegradable.

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12.3. Bioaccumulative potential

No data available on bioaccumulation.

Ecological information on ingredients

PHOSPHORIC ACID (CAS: 7664-38-2)

Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating

ALCOHOL ETHOXYLATE (CAS: 68439-46-3)

Bioaccumulation factor

BCF 12.7 Pimephales promelas (Fat-head Minnow)

REACH dossier information

12.4. Mobility in soil Mobility: The product is soluble in water.

12.5. Results of PBT and vPvB assessment Not determined.

12.6. Endocrine Disruptor Properties None

12.7 Other Adverse Effects N/A

**SECTION 13: DISPOSAL CONSIDERATIONS**

General information: Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority

13.1. Waste treatment methods

Dispose of waste in accordance with local regulations. Recover, reclaim or recycle, where possible.

**SECTION 14: TRANSPORT INFORMATION**

 **REGULATIONS CLASS**

 RID/ADR: 8

 ICAO/IATA-DGR: 8 UN 1805

 GGVSee/IMDG-Code: 8

14.1. UN number UN 1805

14.2. UN proper shipping name PHOSPHORIC ACID SOLUTION

14.3. Transport hazard class(es) 8

14.4. Packing Group III

14.5. Environmental Hazards Environmentally Hazardous Substance/Marine Pollutant: N/A

14.6. Special precautions for user NA

14.7. Transport in bulk according

to Annex II of MARPOL73/78 &

the IBC Code N/A

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**SECTION 15: REGULATORY INFORMATION**

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

EU Legislation

Regulation (EC) No 1907/2006 - Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). (As amended)

Regulation (EC) No 1272/2008 of the European Parliament & of the Council of 16 December 2008 on classification, labelling & packaging of substances & mixtures (as amended)

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

**SECTION 16: OTHER INFORMATION**

Revision Comments

Re-issued according to Regulation (EU) No 2015/830

Revision Date: 01.08.21

Revision No: 5

Replaces version of: 01.01.17

Hazard Statements In Full

H302 Harmful if Swallowed

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage

H400 Very Toxic to aquatic life

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The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should therefore not be construed as guaranteeing specific properties.

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