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| SECTION 1. Identif  | Safety data sheet   | ipany/undertaking  |
| 1.1. Product identifier<br>Product name                     | Remover Plus Powder RP10P   |  |
| 1.2. Relevant identified us<br>Intended use                 | es of the substance or mixture and uses advised against<br>Descaling powder suitable for plants with elements in stainles<br>use.                   | ss steel, aluminum, tin, light alloys. Industrial                            |
| 1.3. Details of the supplie                                 | -   |  |
| Full address  | Mouldpro ApS<br>Baltorpbakken 10 2750   |  |
| District and Country  | Ballerup Denmark<br>Tel. +45 7020 3131  |  |
|   | Fax. +45 7020 3151  |  |
| e-mail address of the comp                                  | etent person support@mouldpro.com   |  |
| responsible for the Safety D                                | Data Sheet  |  |
| 1.4. Emergency telephone<br>For urgent inquiries refer to   |   |  |
|   |   |  |
|   |   |  |
|   |   |  |
| SECTION 2. Hazard   | ds identification.  |  |
| 2.1. Classification of the s                                | substance or mixture.   |  |
|   | hazardous pursuant to the provisions set forth in EC Regulation 1   |  |
| ippiements). The product th<br>ny additional information co | us requires a safety datasheet that complies with the provisions of EC<br>ncerning the risks for health and/or the environment are given in section | Regulation 1907/2006 and subsequent amendmer<br>ons 11 and 12 of this sheet. |

| H319 | Causes serious eye irritation.                     |
|------|--|
| H315 | Causes skin irritation.                            |
| H412 | Harmful to aquatic life with long lasting effects. |
|      | H315   |

2.2. Label elements.

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Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.



Signal words:

Hazard statements:

| H319 | Causes serious eye irritation.                     |
|------|--|
| H315 | Causes skin irritation.                            |
| H412 | Harmful to aquatic life with long lasting effects. |

Warning

Precautionary statements:

| P264      | Wash your hands thoroughly, the equipment and the exposed areas with water after use. |
|-----------|---|
| P273      | Avoid release to the environment.   |
| P280      | Wear protective gloves / eye protection / face protection.                            |
| P302+P352 | IF ON SKIN: wash with plenty of water /   |
| P332+P313 | If skin irritation occurs: Get medical advice / attention.                            |

## 2.3. Other hazards.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

## SECTION 3. Composition/information on ingredients.

### 3.1. Substances.

Information not relevant.

### 3.2. Mixtures.

Contains:

| Identification.           | Conc. %. | Classification 1272/2008<br>(CLP).                                  |
|---------------------------|----------|---|
| SULPHAMIC ACID            |          |   |
| CAS. 5329-14-6            | > 50     | Eye Irrit. 2 H319, Skin Irrit. 2<br>H315, Aquatic Chronic 3<br>H412 |
| EC. 226-218-8             |          |   |
| INDEX. 016-026-00-0       |          |   |
| Reg. no. 01-2119488633-28 |          |   |

The full wording of hazard (H) phrases is given in section 16 of the sheet.

# **SECTION 4. First aid measures.**

4.1. Description of first aid measures.

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EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

## **SECTION 5. Firefighting measures.**

### 5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT None in particular.

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

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

### 5.3. Advice for firefighters.

### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations. SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## **SECTION 6.** Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

If there are no contraindications, spray powder with water to prevent the formation of dust. Avoid breathing vapours/mists/gases. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

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#### 6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Use spark-proof mechanical equipment to collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

# **SECTION 7. Handling and storage.**

### 7.1. Precautions for safe handling.

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

SULPHAMIC ACID: Storage class VCI: 88

### 7.3. Specific end use(s).

Information not available.

## **SECTION 8. Exposure controls/personal protection.**

#### 8.1. Control parameters.

Information not available.

### 8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

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### HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374). Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION None required, unless indicated otherwise in the chemical risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

# **SECTION 9.** Physical and chemical properties.

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

| Appearance<br>Colour<br>Odour<br>Odour threshold.<br>pH.<br>Melting point / freezing point.<br>Initial boiling point.<br>Boiling range.<br>Flash point.<br>Evaporation rate<br>Flammability (solid, gas)<br>Lower inflammability limit.<br>Upper inflammability limit.<br>Upper explosive limit.<br>Upper explosive limit.<br>Upper explosive limit.<br>Vapour density<br>Relative density.<br>Solubility<br>Partition coefficient: n-octanol/water<br>Auto-ignition temperature.<br>Decomposition temperature.<br>Viscosity<br>Explosive properties<br>Oxidising properties | solid powder<br>red<br>odourless<br>Not available.<br>1,2 (10 g/l a 25°C)<br>205 °C.<br>Not available.<br>Not available. |
|--|--|
| 9.2. Other information.  |  |
| Molecular weight.  | 97,205   |

| iviolecular weight. 97         | ,205   |
|--------------------------------|--------|
| Solid content. 10              | 0,00 % |
| VOC (Directive 2010/75/EC) : 0 |        |
| VOC (volatile carbon): 0       |        |

## **SECTION 10. Stability and reactivity.**

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### 10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

SULPHAMIC ACID: decomposes at 205°C/401°F.

### 10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

SULPHAMIC ACID: the product is very stable as crystalline solid, anhydrous, in aqueous solution is very acid, and hydrolyzes slowly at room temperature to form sulfate and bisulfate.

### 10.3. Possibility of hazardous reactions.

No hazardous reactions are foreseeable in normal conditions of use and storage.

SULPHAMIC ACID: risk of explosion on contact with chlorine. Reacts dangerously with metal nitrites and nitrates.

### 10.4. Conditions to avoid.

None in particular. However the usual precautions used for chemical products should be respected.

### 10.5. Incompatible materials.

SULPHAMIC ACID: chlorine, nitric acid, sodium nitrites and nitrates, potassium.

### 10.6. Hazardous decomposition products.

SULPHAMIC ACID: sulphur oxides and nitric oxides.

## **SECTION 11.** Toxicological information.

### 11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

SULPHAMIC ACID LD50 (Oral).1450 mg/kg Rat

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# **SECTION 12. Ecological information.**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity.** SULPHAMIC ACID: no specific information is available on this product.

### 12.2. Persistence and degradability.

SULPHAMIC ACID Solubility in water. > 10000 mg/l Biodegradability: Information not available.

### 12.3. Bioaccumulative potential.

SULPHAMIC ACID: no specific information is available on this product.

12.4. Mobility in soil.

SULPHAMIC ACID: no specific information is available on this product.

### 12.5. Results of PBT and vPvB assessment.

SULPHAMIC ACID: This product is not, or does not contain a substance classified as PBT or vPvB.

12.6. Other adverse effects.

SULPHAMIC ACID: no specific information is available on this product.

## **SECTION 13. Disposal considerations.**

### 13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

## **SECTION 14. Transport information.**

14.1. UN number.

Not applicable.

14.2. UN proper shipping name.

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Not applicable.

### 14.3. Transport hazard class(es).

Not applicable.

### 14.4. Packing group.

Not applicable.

### 14.5. Environmental hazards.

Not applicable.

14.6. Special precautions for user.

Not applicable.

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

None.

Information not relevant.

## **SECTION 15. Regulatory information.**

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

Seveso category.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

None.

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

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None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

### 15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

# **SECTION 16.** Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| Eye Irrit. 2      | Eye irritation, category 2   |
|-------------------|--|
| Skin Irrit. 2     | Skin irritation, category 2  |
| Aquatic Chronic 3 | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| H319              | Causes serious eye irritation.                                     |
| H315              | Causes skin irritation.  |
| H412              | Harmful to aquatic life with long lasting effects.                 |
|                   |  |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
   LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit

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|                          | Ĵ                                      |

- TWA: Time-weighted average exposure limit

VOC: Volatile organic Compounds

- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website
- Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses. Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review:

The following sections were modified:

13 / 14.