SAFETY DATA SHEET

Emission date: 2024-09-10



Section 1. Identification

Product name

Robot Acid Plus

Code:

802315156

Recommended use

Automated milking system cleaner and rinse

Restrictions on use

: For professional use only.

Supplier/Manufacturer

: Grand River Robotics 598 Glengarry Crescent, Fergus, ON N1M 2W8

Emergency phone (24 hour service)

: Carechem 24: 1-215-207-0061

toll free: 1-800-579-7421

Canada (266) 383-7678

Section 2. Hazard identification

Product classification

: CORROSIVE TO METALS - Category 1 SKIN CORROSION - Category 1

SERIOUS EYE DAMAGE - Category 1

Hazard pictograms



Signal word

: Danger

Hazard statements

: May be corrosive to metals.

Causes severe skin burns and eye damage.

Precautionary statements

Prevention

: Wear protective gloves, protective clothing, and eye or face protection. Keep only in original packaging. Wash hands thoroughly after handling.

Response

: Absorb spillage to prevent material damage. IF INHALED: Remove person to fresh air and keep comfortable for

breathing. Immediately call a POISON CENTER or doctor.

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage

: Store locked up.

Disposal

Dispose of contents and container in a waste disposal facility, in accordance with all local, regional and national regulations.

Other hazards : None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Hazardous ingredients

- Phosphoric acid

CAS number

Concentration %

7664-38-2

15 - 30

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Skin contact

: Get medical attention immediately. Wash contaminated skin with soap and water. Continue to rinse for at least 10 minutes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician.

Inhalation

: Get medical attention immediately. Remove person to fresh air and keep comfortable for breathing. Maintain an open airway. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Page: 1/4

SDS: Robot Acid Plus

802315156

Ingestion

: Get medical attention immediately. Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel.

Notes to medical doctor

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in section 2 and/or in section 11 of this safety data sheet.

Section 5. Fire-fighting measures

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: phosphorus oxides

Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

for fire-fighters

Special protective equipment: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or spray. Provide adequate ventilation, Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if waterinsoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or spray. Wash hands thoroughly after handling. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage. Manipulate with care, avoid splashes.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a corrosion resistant container with a resistant inner liner. Separate from alkalis. Keep away from metals. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.

Section 8. Exposure controls/personal protection

Control parameters

- Phosphoric acid

Occupational exposure limits:

Hazardous ingredients

CAS number

Exposure limit values

7664-38-2

CA Quebec Provincial (Canada)

TWA: 1 mg/m3. STEL: 3 mg/m3.

Appropriate engineering controls

Ensure ventilation is adequate if there is a risk of aerosol formation or vapor build-up.

Personal protective equipment

Eye/face Hands

: Wear eye protection against chemical splashes.

: Wear chemical-resistant, impervious gloves.

Respiratory

: No respiratory protection required under normal handling conditions.

Other

: Wear appropriate protective clothing to prevent skin contact.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Section 9. Physical and chemical properties

pH : <1 Physical state : Liquid. [Transparent liquid.]

Relative density : 1,153 Color : Red.

Volumic mass : 1,153 g/cm³ Odor : Odorless.

Boiling point : Not available.

Melting/freezing point : Not available.

Vapor Pressure : Not available.

Vapor density : Not available.

Solubility : Yes. [Miscible in water.]

Flash point : Closed cup: >93,3°C [Product does not sustain combustion.]

Viscosity : Kinematic: Not available.

Flammability (solid, gas) : Not available.

Flammable limits : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Particle characteristics : Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous : Under normal conditions of storage and use, hazardous reactions will not occur.

Callina

Conditions to avoid : No specific data.

Incompatible materials : Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures

with air. Reactive or incompatible with the following materials: alkalis metals

Hazardous decomposition : Under normal conditions of storage and use, hazardous decomposition products should not be

products produced

Likely routes of exposure

Section 11. Toxicological information

Potential acute health effects

Eye contact : Causes serious eye damage.
Skin contact : Causes severe burns.

Inhalation : The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

: Dermal contact. Eye contact. Inhalation. Ingestion.

Ingestion : May cause burns to mouth, throat and stomach.

Potentials symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Pain, watering, redness

Skin contact : Pain or irritation, redness, blistering may occur

Inhalation : respiratory tract irritation, coughing

Ingestion : Stomach pains

Potential chronic health effects

Carcinogenic Effects
 Mutagenic Effects
 No known significant effects or critical hazards.
 Teratogenic Effects
 No known significant effects or critical hazards.
 Reproductive effects
 No known significant effects or critical hazards.
 Sensitizer
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Numerical measures of acute toxicity

| Hazardous ingredients | Species | Result | Dose |
|-----------------------|---------|-----------------|------------|
| - Phosphoric acid | Rat | LC50 Inhalation | 3846 mg/m³ |
| | | Vapor | |
| | Rabbit | LD50 Dermal | 2740 mg/kg |
| | Rat | LD50 Oral | 1530 mg/kg |

Section 12. Ecological information

Ecotoxicity: No known significant effects or critical hazards.

Persistence and degradability

Not available.

Section 13. Disposal considerations

Waste handling and disposal

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| Reg. info. | UN# | Proper shipping name | Classes | PG* | Label | Additional information |
|------------|--------|---------------------------|---------|-----|-------|--|
| TDG Class | UN1805 | PHOSPHORIC ACID, SOLUTION | 8 | III | | Remarks Limited quantity in 5L or less |

PG*: Packing group

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

Classification of this product and the SDS have been made in accordance with Hazardous Products Regulations (HPR) in force in Canada. This product is a mixture for which no specific health effects data exist. The risks have therefore been evaluated based on the physicochemical properties of the product and its composition and may be overestimated.

Food contact

: Not available.

DSL; Canadian Domestic

: All components are listed or exempted.

Substance List

Section 16. Other information

Date of issue

: 2024-09-10

Version

: 1.1

Notice to reader

The information provided in this Safety Data Sheet has been compiled from our experience and data presented in various technical publications. The information contained herein is based on the state of our current knowledge of the product concerned. It is the user's responsibility to verify the value of this information for the adoption of required safety measures. We reserve the right to revise Safety Data Sheets from time to time as new technical information becomes available. The user has the responsibility to contact the company to make sure that the Safety Data Sheet he owns is the last published.

Prepared by: Department of Regulatory Affairs of Kersia Canada.

Phone: 819-228-5564