

Safety Data Sheet

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Issue Date:

05-Apr-23

DeluxeForce

NOT CLASSIFIED AS HAZARDOUS

NOT Classified As Hazardous for Transport by Rail and Road

1. Product and Company Identification

Product Name: DeluxeForce
Product Description: White, free flowing granular powder
Recommended Use: CIP, COP, Stainless Steel cleaner for Wineries.
Company Details: Rama's Miracle Tank
16 Cumquat Court, Cranbourne North 3977
Victoria, Australia
Telephone Tel: 61 452 511 875
International Emergency No: 61 452 511 875
Web site www.ramasmiracletank.com.au

Poisons Information For advice, contact a Poison Information Centre (e.g. phone Australia 131 126) or a doctor (immediately)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Model Work Health and Safety Regulations

Skin Corrosion - Category 1A	H290: May be corrosive to metals
Corrosive to metals, Category 1	H302: Harmful if swallowed
Serious eye damage, Category 1	H312: Harmful in contact with skin
	H314: Causes severe skin burns and eye damage
	H318: Causes serious eye damage
	H335: May cause respiratory irritation

SUSMP (AU)
Schedule 5

2.2 Label Elements

Hazardous products which must be listed on the label

CAS-No. 10213-79-3 Disodium salt (Pentahydrate)

Hazard Pictograms(s):



Corrosion



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Signal Word: Danger

Hazard Statement(s):

H290: May be corrosive to metals
H302: Harmful if swallowed
H312: Harmful in contact with skin
H314: Causes severe skin burns and eye damage
H318: Causes serious eye damage
H335 May cause respiratory irritation

Prevention

P260 Do not breathe dust or mists.
P264 Wash exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection
P273 Avoid release to the environment
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

Response

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth.
Do not induce vomiting
P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor if you feel unwell.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower (copiously).
P310 Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 IF IN EYE: Rinse cautiously with water for several minutes, Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor.
P390 Absorb spillage to prevent material damage.

Storage

P403 + P235 Store in a well ventilated place, Keep cool

2.3 Other Hazards
Refer complete SDS.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Not applicable, this product is a mixture

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3.2 Mixture

Synonyms Not Applicable
Formula Mixture
Chemical nature Mixture

Information on Components and impurities

Chemical Name	CAS No.	GHS Classification	Concentration (%)
Disodium salt (Pentahydrate)	10213-79-3	Skin Corrosion - Category 1A Corrosive to metals, Category 1 Serious eye damage, Category 1 H290: May be corrosive to metals H302: Harmful if swallowed H312: Harmful in contact with skin H314: Causes severe skin burns and eye damage	Less than 25%
		H318: Causes serious eye damage	
Non hazardous ingredients *			Balance

* (Ingredients present at non-hazardous concentrations, according to criteria of SWAC (Australia) based on available information)

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4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice Show this Safety Data Sheet to the doctor in attendance.

Swallowed: **DO NOT** induce vomiting. Immediately wash out mouth with water (only if person is conscious). **Call a physician or poison control centre immediately. SEEK IMMEDIATE MEDICAL ATTENTION.** Take victim immediately to hospital. Artificial respiration an/or oxygen may be necessary.

Eye: If contact with the eye(s) occur, wash with copious amounts of water for approximately 20 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. **SEEK IMMEDIATE MEDICAL ATTENTION.** Take victim immediately to hospital.

Skin: Immediately Remove contaminated clothing and wash skin thoroughly with plenty of water and a suitable soap. **Discard contaminated clothing or wash thoroughly before re-use.** If irritation persists or there is any sign of tissue / skin damage, **Seek Immediate Medical Attention.**

Inhaled: Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have a qualified person give oxygen through a face mask if breathing is difficult. If victim has stopped breathing begin artificial respiration, or if heart has stopped, cardiopulmonary resuscitation. **SEEK IMMEDIATE MEDICAL ATTENTION.** Take victim immediately to hospital.

Health hazards

4.2 Most important symptoms and effects, both acute and delayed:-

Ingestion: Will cause **severe chemical burns** to the throat, gastrointestinal tract, mouth and stomach. Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain, swelling of the larynx and subsequent suffocation, Perforation of the gastrointestinal tract, Coma and **Possible Death.**

Eye: **Risk of serious eye damage. Corrosive to eyes;** Contact will cause corneal burns, permanent eye damage and blindness.

Skin: May cause severe chemical burns and irritation in contact with the skin, which will result in itching, redness, swelling, extreme skin and tissue destruction.

Inhaled: Inhalation of mists will result in respiratory irritation and possible harmful corrosive effects, including lesions of the nasal septum, pulmonary oedema, pneumonitis and emphysema. Inhalation of mists at elevated temperatures will increase these symptoms.

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4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

Take victim immediately to hospital

Immediate medical attention is required

Consult with an ophthalmologist immediately in all cases.

Burns must be treated by a physician

If swallowed:

Keep under medical supervision for at least 96 hours.

DeluxeForce

5. FIRE FIGHTING MEASURES

Extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
This material is compatible with all extinguishing media.

5.2 Special Hazards arising from the substance or mixture

Fire / Explosion Non flammable or combustible.

Hazard Reaction with metals will produce flammable hydrogen gas which will burn if ignited.

5.3 Advice for Firefighters

Special protective equipment for the firefighters

Fire fighters to wear self-contained breathing apparatus, full protective clothing along with protective equipment.

Wear chemical resistant oversuit

Cool containers/tanks with water spray

Prevent fire extinguishing water from containing surface water or the ground water system.

Hazchem Code: N/A

Further Information Keep product and empty container away from heat and sources of ignition.

Approach from upwind.

Prevent fire extinguishing water from contaminating surface water or ground water system.

Evacuate all non-emergency personnel to a safe area.

6. ACCIDENTAL RELEASE MEASURES

Waste Disposal, Spillage and Leak Procedures: Slippery when spilt. Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contamination. Contain using sand and soil - prevent runoff into drains and waterways. Use absorbent (soil or sand, inert material, vermiculite). Collect and seal in properly labelled containers for disposal. Caution - heat may be evolved on contact with water. If contamination of sewers or waterways has occurred advise the local emergency services.
Waste Disposal Method: Refer to State Land Waste Management Authority.
Empty containers must be decontaminated.

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Advice for emergency responders

Use personal protective equipment

Prevent further leakage or spillage.

Keep away from incompatible products, naked flames, acids, explosives, oxidising agents. etc.

Dike spills immediately.

6.2 Environmental precautions:

Discharge into the environment must be avoided.

Do not flush into surface water or sanitary sewer system.

In case of accidental release or spill, immediately notify the appropriate authorities

if required by Federal, State/Provincial and local laws and regulations.

6.3 Methods and materials for containment and cleaning up

Dam up/ Dike spills immediately.

Soak up with inert absorbent material

Do not let product enter drains

Keep in suitable, closed containers for disposal

Properly label containers

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8

7. Handling and Storage

7.1 Precautions in If hand contact is necessary, user must wear:

Use or Chemical and Heat Resistant Elbow Length Gloves.

Handling: Avoid eye and facial contact by Wearing a Full Face Shield in conjunction with goggles.

Wear a complete Chemical Resistant Splash Proof Suit that covers all parts of Head and skin. User must wear An appropriate breathing apparatus.

Chemical Resistant Safety Footwear.

Always wash hands before eating, drinking, smoking or using the toilet.

Ensure that eyewash stations and safety showers are close to the workstation location.

Keep away from incompatible materials

Keep away from heat, fire or naked flames.

Do not allow contact with organic materials

Handle in accordance with good industrial hygiene and safety practices.

Never return unused material to storage receptacle/containers.

Before all operations, carefully passivate the piping circuits, containers and vessels as gas and vapour may have developed within the container.

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7.2 Storage Precautions, conditions for safe storage, including any incompatibilities

Store in a cool, dry, dark place with correct bunding.
 Tanks, containers must be carefully stress relieved after 40°C.
 Store in a well ventilated area with suitable engineering controls and ventilation.
 Keep containers closed at all times.
 Keep in original container
 Keep tightly closed in a dry, cool and well ventilated place.
 Keep in properly labelled containers.
 Keep in banded area.
 Keep away from all sources of heat/sparks/open flames/hot surfaces. No smoking.
 Electrical equipment should be protected to the appropriate standard.
 Store away from incompatible products,
 Over a period of time, sludges may develop in the base of storage tanks. The sludge may contain mercury in a finely divided form, spread throughout the particulate matter in the sludge.
 Store away from all other chemicals, refer transport information, section 14.

Packaging Material

Suitable material

Stainless steel cleaned and passived
 Approved grades of HDPE
 Breathing valves may be required
 Do not store in aluminium or galvanised containers or use die-cast zinc or aluminium bungs. Plastic bungs should be used.

7.3 Specific end use(s)

Contact supplier for additional information. Do not use for any other purpose apart from what this product is intended for.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautions For Use / Exposure Standards						
Exposure:	Name	Stel (mgm3)	Stel (ppm)	TWA (mgm3)	TWA (ppm)	Foot Note
	Inspirable dust	10				Peak Limitation.
	Respirable dust	3				Peak Limitation.

8.2 Exposure Controls

Engineering Controls: Provide adequate ventilation, however where vapours or mists are generated, the use of a local exhaust ventilation system (drawing vapours/mists away from workers breathing zone) is required.
 Apply technical measures to comply with the occupational exposure limits.

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Precautions For Use / PPE Equipment

- Respirator Type (AS 1716)** If engineering controls are not effective in controlling airborne exposure then a supplied air respirator should be used. Final choice of appropriate breathing protection is dependant upon actual airborne concentrations and the type of breathing protection required will vary according to individual circumstances. Expert advice may be required to make this decision. Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices. Respirator with a vapour filter (EN 141)- Seek further professional advice. Recommended Filter type ABEK-P2 - Seek further Professional advice.
- Eye Protection:** The use of face shield in conjunction with chemical goggles or safety glasses protection complying with AS/NZS 1337 is highly recommended / required.
- Glove Type:** Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Gloves should be chemical / heat resistant and elbow length. Suitable material:
Butyl rubber, break though time >480 min, Glove thickness >=0.4mm
- Clothing:** The use of a complete Chemical Resistant Splash Suit, Plastic Apron, Sleeves, Overalls and Chemical Resistant Safety Footwear are Required.
Boots and apron should be made of chemical proof butyl rubber.
- Work / Hygienic Practices:** Ensure a high level of personal hygiene is maintained when using this product.
Always wash hands before eating, drinking, smoking or using the toilet.
Wash safety equipment thoroughly before re-use, or dispose of and use new equipment.

When using this product:

The use of a face shield, chemical goggles or safety glasses with side shield is required. Wear gloves of impervious material conforming with As/NZS 1337. Plastic Apron, sleeves, overalls and rubber boots are required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White, free flowing granular powder
Odour:	Odourless
Odour Threshold	No data available
pH: (1% Solution)	12 - 13
Melting/Freezing Point	ca.73°C
Boiling Point and Boiling Range	No data available
Flash Point	Does not flash.
Evaporation Point	No data available
Flammability	The product is not flammable.
Upp/Lower flammability/explosive limits	Not explosive

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Vapour Pressure	Nil at 20°C
Vapour density	No data available
Relative density	Not applicable
Solubility,(ies):	Completely miscible with water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available

Viscosity	Not applicable
Specific heat value	No data available
Particle size	Not applicable
Oxidising properties	Not applicable
% Volatiles:	No data available
Saturated vapour concentration	No data available
Release of invisible flammable vapours and gases	Not applicable
Packaging:	15 20,25,200, 1000 KG Containers

9.2 Other information/ Properties:

Form: Corrosive to metals

10. STABILITY AND REACTIVITY

10.1 Reactivity:

Decomposes on heating

Reacts with metals: Aluminium, zinc and their alloys, tin, copper, lead, etc.

Potential exothermic hazard

Highly exothermal reaction with acids.

Reacts with oxidising agents.

10.2 Stability

Stable at recommended storage conditions.

10.3 Possibility of hazardous reactions

Reacts with aluminium, tin, zinc and their alloys, copper, lead, etc. When product decomposes, toxic sodium oxide gases may be given off during the reaction.

Highly dangerous and exothermic reactions will occur with acid bases.

Release of oxygen and decomposition will occur when mixed with oxidising agents.

10.4 Conditions to avoid

Protect from heat, sunlight and direct flames

Contamination

To avoid thermal decomposition, do not overheat.

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10.5 Incompatible materials and possible hazardous reactions

Incompatible with:

- * Acids
- * Metals
- * Heavy metal salts
- * Oxidising agents
- * Powdered metal salts
- * Reducing agents

10.6 Hazardous decomposition products

- * Hydrogen; sodium oxide gases.

11. TOXICOLIGICAL INFORMATION

No Data available for product.

Data for Disodium metasilicate Pentahydrate:

Acute oral toxicity	LD50 (mouse): 2400 mg/kg (Patty 1993)
Acute Dermal toxicity	(Human): 250 mg/24hrs caused severe effects.
Acute inhalation toxicity	No data available
Eye	No data available
Intra peritoneal	No data available
Skin corrosion/irritation	Corrosive, Causes severe burns.
Serious eye damage irritation	Causes severe burns. Can cause ulceration of the conjunctiva and cornea. Can cause permanent loss of vision.
Respiratory/skin sensitisation	No data available
Mutagenicity in vitro	No data available
Mutagenicity in vivo	No data available
Carcinogenicity	No data available
Reproductive toxicity	Not toxic for reproduction
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	No data available
Aspiration hazard	No data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Data for Disodium metasilicate Pentahydrate:

Acute toxicity to fish	LC50 (Rainbow Trout, 96hrs): 260-310 mg/L (pH7-8)
Acute toxicity to invertebrates	LC50 (Daphnia Magna 48hrs): 1700 mg/L (pH8)
Acute toxicity to algae	EC50 (Algae, 72hrs) : 209 mg/L (pH8)
Chronic toxicity to fish	No data available
Chronic toxicity invertebrates	No data available
Toxicity to microorganisms	No data available
Effects of terrestrial organisms	No data available
Sediment toxicity	No data available

12.2 Persistence and degradability

Degradation	Aerobic - Readily biodegradable
Hydrolysis	Does not hydrolyse

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Photolysis No data available

12.3 Bioaccumulative potential

Partition co-efficient (Log Pow): Not potentially bioaccumulate

Bioconcentration factor (BCF) Does not bioaccumulate

12.4 Mobility in soil Water, soluble, mobile.

12.5 Other adverse effects None Known

13. DISPOSAL CONSIDERATION

Empty Container: Triple or preferably pressure rinse containers before disposal. Add rinsing's to spray tank. Do not dispose of undiluted chemicals off site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Product: Disposal must be in accordance with applicable local regulations.

14. TRANSPORT INFORMATION

Hazchem Code:	N/A	U.N. Number	N/A
Packaging Group:	N/A	U.N. Hazard Class:	N/A
D.G. Class:	N/A	Subsidiary Risk:	N/A
		Poisons Schedule:	5

Transport Precautions

Proper Shipping Name:	N/A
Un Number:	N/A
Dangerous Goods Class:	N/A
Subsidiary Risk:	N/A
PG Group:	N/A
Precaution for User:	N/A
Hazchem Code:	N/A
Marine Pollutant	No

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Transport

This material is not a classified Substance according to:
the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Do not carry with the following loads::

Do not load with any of the following:

- Class 1, Explosives
- Class 2.1, 2.3 Flammable and Toxic gases.
- Class 3, Flammable liquids.
- Class 4.3, Dangerous When Wet Substances
- Class 5.1, Oxidising Agents & Class 5.2 - Organic Peroxides
- Class 6, Toxic Substances (where the Toxic substances are cyanides and the corrosives are acids),
- Class 7, Radioactive Substances and are incompatible with food and food packaging in any quantity.
- Class 8, Miscellaneous Dangerous Goods.

And are incompatible with food and food packaging in any quantity.

Keep away from Miscellaneous flammable and explosive products.

15. REGULATORY INFORMATION

Australian Inventory of Chemicals Substances (AICS)

All components of this product are either listed on the inventory or are exempt from listing

Poison Schedule (SUSMP Australia)

* Schedule 5

16. OTHER INFORMATION

Personal Protection Required



Chemical Resistant Gloves, Face Shield, Chemical Resistant Safety Boots, Chemical Resistant Splash Suit, Safety Goggles

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Full text of H-Statements

H290: May be corrosive to metals

H302: Harmful if swallowed

H312: Harmful in contact with skin

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

H335: May cause respiratory irritation, (Respiratory system)

Key or legend to abbreviations and acronyms used in the safety data sheet

STEL Exposure standard - short term exposure limit

TWA Exposure standard - time weighed average

ca. approximately

LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

Technical Chemist: Madan Chellappan

SDS Expiry Date: Expiry Date is 5 years from date of issue, however SDS are modified as a change laws occurs, we also often change our MSDS on an annual basis.

IMPORTANT ADVICE:

This SDS was prepared in accordance with Model Work Health and Safety Regulations & Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals.

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Easy Clean Chemicals Pty Ltd.

Disclaimer:

It is believed that the information given in this bulletin is accurate at the issue date. It is offered in good faith but without guarantee and without acceptance of responsibility for its accuracy.

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