



Material Safety Data Sheet

Product : PURESAFE

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

BioShields - A Division of Tulip Diagnostics Pvt. Ltd.

Plot No. M – 46, Phase III B,
Verna Industrial Estate,
Verna, Goa, 403 722,
INDIA.

Product name : PURESAFE

Synonyms : Multipurpose, Broad Spectrum Formulation.

2. COMPOSITION/INFORMATION ON INGREDIENTS

The ingredients at their given percentages in this product are not considered hazardous to your health.

Components	CAS Number	Weight %
Sodium Dichloroisocyanurate	2893-78-9	33 – 43 % w/w
Sodium Hydrogen Carbonate	144-55-8	21 - 30 % w/w
Adipic Acid	124-04-9	21 - 30 % w/w

3. HAZARDS IDENTIFICATION

Emergency overview : None

Properties affecting health : None

Principle routes of exposure :

Oral : Can irritate the tissues of mouth, oesophagus and other tissues of the digestive system. Symptoms of over exposure can include vomiting, diarrhea and nausea.

Eye contact : Exposure may cause severe irritation and/or chemical burns with corneal damage. Impairment of vision is possible.

Skin contact : Exposure can cause severe irritation and/or chemical burns chronic exposure effects would be similar to those from accurate exposure for effects secondary to tissue destruction. Prolonged skin exposure may cause dermis destruction with impaired skin regeneration at the site of contact.

Ingestion : Ingestion can cause irritation and/or chemical burns to the gastrointestinal tracts characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding and ulceration. Chronic toxicity via this route is unlikely due to its corrosive nature.

Inhalation : Acute exposure may cause severe irritation to the respiratory tract resulting in lung Oedema which can cause shortness of breath, wheezing, choking, chest pain and impaired lung function. Inhalation of higher concentrations can result in permanent lung damage Chronic exposure may cause impairment of lung function and permanent lung damage.

Physico – chemical

Properties : This product may cause eye, skin or respiratory irritation.

Hazard information :

Sensitization : May cause sensitization by inhalation and skin contact. Causes skin burns and irreversible eye damage.

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Medical conditions

Aggravated by exposure : Inhalation of this powder in sufficient quantities may cause irritation of the upper respiratory passages, nose and throat. Gross over exposure may cause ulceration of the mucous membranes.

4. FIRST AID MEASURES

- Eye contact** : In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and immediately seek medical attention.
- Ingestion** : Do not induce vomiting, if conscious, drink plenty of water. Do not ingest emetic. all a physician or Poison Control Center immediately.
- Inhalation** : Remove from exposure, lie down. Move to fresh air immediately. If symptoms of coughing, choking or wheezing prove troublesome or if victim has stopped breathing give artificial respiration and / or oxygen may be necessary and if recovery is not rapid seek medical attention / Consult a physician.
- Skin contact** : Rinse with water. Remove contaminated clothing and wash before re – use. Consult a physician if irritation persists.
- Protection of first-aiders** : No information available.
- Notes to physician** : Probable damage to the respiratory system through dust release.

5. FIRE – FIGHTING MEASURES

- Flash point (⁰F)** : Unknown on product.
- Flash point (⁰C)** : Unknown on product.
- Autoignition temperature** : Unknown on product.
- Flammable limits in air – lower (%)** : Unknown on product.
- Fire fighting information** :
- Suitable extinguishing media** : Pressurized water or dry powder.
- Extinguishing media which must not be used for safety reasons** : Do not use dry fire extinguishers containing ammonium compounds.
- Specific methods** : It is a powerful oxidizing agent, decomposes violently upon liberating oxygen. Once the area is extinguished, wash the area thoroughly with excess water.
- Special protective equipment for firefighters** : Wear self-contained breathing apparatus for firefighting.
- Hazardous combustion products** : Non Combustible, but can support combustion of other material.
- Explosivity** : None.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Wear eye and skin protection while handling material for clean up. (Wear nitrile or latex gloves).
Responders should wear gloves, goggles and suitable body protection. Where there is a risk of product contact with shoes, chemical resistant shoe coverings are recommended.
- Environmental precautions** : Do not allow the powder to enter the drains. Smaller quantities may be diluted to waste with large quantities of water. Do not allow entry to surface waters.

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Methods for cleaning up : Sweep up carefully, preferably with aid of a suitable dry ant dusting agent if available. Place in containers of disposal.
Prevent powder from becoming, moist whilst awaiting disposal, if possible. Moist product Awaiting disposal must be kept away from combustible material and stored in manner which allows suitable ventilation of the waste.

7. HANDLING AND STORAGE

Handling:

Technical measures / precautions

: No special technical protective measures required.

Safe handling advice

: Use only in well-ventilated areas. Avoid breathing vapors or mist.

Avoid contact with skin and eyes. Eye and skin protection recommended. Wear chemical resistant gloves.

Storage:

Technical measures/storage conditions

: Store away from all incompatible and combustible materials. Store in cool, well-ventilated place. Avoid high humidity levels. Keep away from fire, heat, flame and direct sunlight. Keep container tightly closed. Keep out of reach of children. Never store damp or contaminated material.

Incompatible products

: Contact with water liberates chlorine and with nitrogen compounds may cause explosion. Avoid organic material, oil, grease, sawdust, reducing agents, nitrogen containing compounds, calcium hypochlorite, other oxidizers, acids, alkalis, cationic and certain non-ionic surfactants.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls

: Appropriate Local Exhaust Ventilation may be necessary for handling the product where dust formation is a problem.

Eye protection

: Safety glasses required. For routine use, wear ANSI approved safety glasses. Where there is risk of product coming in contact with the eyes, an independent face shield must be worn over the safety glasses.

Hand protection

: Wear chemical resistant gloves. Gloves should be changed frequently during use of product.

Skin and body protection

: Wear suitable protective clothing. Wear chemical resistant lab coat.

Respiratory protection

: Dust masks for fine particles.

Other/general protection

: Overalls.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: Free flowing crystalline powder.

Colour

: White Powder.

Odour

: Slight Chlorine odour.

pH of 1 % w/v solution

: 5.0 – 7.0

Water solubility

: Freely Soluble in water with effervescence.

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10. STABILITY AND REACTIVITY

Chemical stability	: Stable under recommended storage conditions.
Decomposition	
Product	: On contact with moisture NaDCC decomposes readily into Chlorine, Hypochlorous Acid and Cyanuric Acid
Materials to avoid	: Contact with water liberates chlorine and with nitrogen compounds may cause explosion. Avoid organic material, oil, grease, sawdust, reducing agents, nitrogen containing compounds, calcium hypochlorite, other oxidizers, acids, and alkalis, cationic and certain non-ionic surfactants.
Conditions to avoid	: Moisture ingress to the stored powder.

11. TOXICOLOGICAL INFORMATION

Local effects

Oral	: Unknown on product.
Eye irritation	: May cause vision and corneal damage.
Skin irritation	: Severe irritation and/or burns, characteristic by redness, swelling and Scab formation.
Inhalation	: Inhalation can cause irritation to the nose, throat, lungs and respiratory tract.

Chronic toxicity

Oral	: Unknown on product.
Inhalation	: Unknown on product.
Dermal	: Unknown on product.

Specific effects

Corrosive effects	: Unknown on product.
Target organ effects	: None.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Eco toxicity effects	: This product has no known eco – toxicological effects.
Aquatic toxicity effects	: This product is highly toxic to fish. Do not discharge into lakes, ponds, Streams or public water unless in accordance with the permit of official regulations.
Persistence / degradability	: Unknown on product.
Bioaccumulation	: Unknown on product.
Degradation	: Unknown on product.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused product	: This product, if unaltered by use, may be disposed of by treatment at a permanent facility or as advised by your local hazardous waste regulatory authority. The product should not be allowed to enter drains, water sources or soil.
Contaminated packaging	: If recycling is not practicable, dispose of in compliance with local



Methods for cleaning up

regulations.

: Sweep up carefully, preferably with aid of a suitable dry anti-dusting agent if available. Place in containers of disposal. Prevent powder from becoming, moist whilst awaiting disposal, if possible. Moist product awaiting disposal must be kept away from combustible material and stored in manner which allows suitable ventilation of the waste.

14. TRANSPORT INFORMATION

DOT

: Not Applicable (Not classified as dangerous / hazardous material).

IATA / ICAO

: Not Applicable (Not classified as dangerous / hazardous material).

15. REGULATORY INFORMATION

CAS No.

: Not applicable.

Labeling

: For External Use Only.

Safety Phrases

: Keep container dry.

Irritating to skin. Risk of serious damage to eyes.

Keep out of reach of children.

Do not breathe the dust.

Avoid contact with skin or eyes.

In Case of contact with eyes, rinse immediately with plenty of water, seek medical advice.

16. OTHER INFORMATION

Additional advice

: None

Literary Reference

: None

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End of Safety Data Sheet