

# Material Safety Data Sheet

Product Name **ALPHASAN**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

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**Synonym(s)** ALPHASAN FOODSAFE • ALPHASAN SANITISER • SOUTHWELL EXTENDER (NEW ZEALAND)

**Use(s)** MICROBICIDE • SANITISER • WATER TREATMENT

**MSDS Date** 17 Nov 2009

## 2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA

### RISK PHRASES

R23 Toxic by inhalation.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R50 Very toxic to aquatic organisms.

### SAFETY PHRASES

S1/2 Keep locked up and out of reach of children.  
S23 Do not breathe gas/fumes/vapour/spray (where applicable).  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28 After contact with skin, wash immediately with plenty of water.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S38 In case of insufficient ventilation, wear suitable respiratory equipment.  
S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).  
S61 Avoid release to the environment. Refer to special instructions / safety data sheets.

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

<b>UN No.</b>	None Allocated	<b>DG Class</b>	None Allocated	<b>Subsidiary Risk(s)</b>	None Allocated
<b>Packing Group</b>	None Allocated	<b>Hazchem Code</b>	None Allocated	<b>EPG</b>	None Allocated

## 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
CHLORINE DIOXIDE	Cl-02	10049-04-4	<1%
WATER	H2O	7732-18-5	>60%

## 4. FIRST AID MEASURES

**Eye** If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

**Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a doctor.

**Ingestion** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

**Advice to Doctor** Treat symptomatically

**Product Name**     **ALPHASAN**

**First Aid Facilities** Eye wash facilities and safety shower should be available.

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## 5. FIRE FIGHTING MEASURES

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**Flammability**           Non flammable. May evolve small amounts of chlorine gas when heated to decomposition.

**Fire and Explosion**    Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

**Extinguishing**         Prevent contamination of drains or waterways.

**Hazchem Code**         None Allocated

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## 6. ACCIDENTAL RELEASE MEASURES

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**Spillage**                If spilt (bulk), use personal protective equipment. Contain spillage, then cover / absorb spill with non-combustible absorbant material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Clean spill site with water. For small spills, dilute with water and flush to sewer. CAUTION: Spill site may be slippery.

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## 7. STORAGE AND HANDLING

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**Storage**                Store in a cool, dry, well ventilated area, removed from oxidising agents, acids, nitrites, chlorine compounds, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.

**Handling**              Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

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## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

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**Exposure Stds**        CHLORINE DIOXIDE  
                              ES-STEL :     0.3 ppm Chlorine Dioxide  
                              ES-TWA:     0.1 ppm Chlorine Dioxide  
                              WES-TWA:    0.1 ppm (0.28 mg/m3)

**Biological Limits**    No biological limit allocated.

**Engineering Controls**    Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

**PPE**                    Wear splash-proof goggles and rubber or PVC gloves. With prolonged use, wear: a Type AB (Organic and Inorganic gases/vapours) respirator.



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance</b>	CLEAR YELLOW LIQUID	<b>Solubility (Water)</b>	SOLUBLE
<b>Odour</b>	CHLORINE ODOUR	<b>Specific Gravity</b>	1.05
<b>pH</b>	2.0 (Approximately)	<b>% Volatiles</b>	> 60 % (Water)
<b>Vapour Pressure</b>	18 mm Hg @ 20°C	<b>Flammability</b>	NON FLAMMABLE
<b>Vapour Density</b>	NOT AVAILABLE	<b>Flash Point</b>	NOT RELEVANT
<b>Boiling Point</b>	110°C	<b>Upper Explosion Limit</b>	NOT RELEVANT
<b>Melting Point</b>	< 0°C	<b>Lower Explosion Limit</b>	NOT RELEVANT
<b>Evaporation Rate</b>	AS FOR WATER		

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable under recommended conditions of storage.
<b>Conditions to Avoid</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>Material to Avoid</b>	Incompatible with oxidising agents (eg. hypochlorites) and acids (eg. nitric acid). Exposure to acids or chlorine compounds may liberate uncontrolled generation of chlorine dioxide gas.
<b>Hazardous Decomposition Products</b>	May evolve small amounts of chlorine gas when heated to decomposition.
<b>Hazardous Reactions</b>	Polymerization is not expected to occur.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Health Hazard Summary</b>	Slightly corrosive - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. Due to the low vapour pressure of this product, an inhalation hazard is not anticipated with normal use. Upon dilution, the potential for corrosive effects may be reduced.
<b>Eye</b>	Slightly corrosive - irritant. Contact may result in irritation, lacrimation, pain, redness, conjunctivitis and possible burns.
<b>Inhalation</b>	Low irritant. Over exposure may result in irritation of the nose and throat, with coughing. Due to the low vapour pressure, an inhalation hazard is not anticipated with normal use.
<b>Skin</b>	Slightly corrosive. Contact may result in irritation, redness, pain, rash and possible burns.
<b>Ingestion</b>	Slightly corrosive. Ingestion may result in burns to the mouth and throat, nausea, vomiting, abdominal pain and diarrhoea. Ingestion of large quantities may result in gastrointestinal inflammation-corrosion and toxic systemic effects.
<b>Toxicity Data</b>	CHLORINE DIOXIDE (10049-04-4) LC50 (Inhalation): > 547 gm/m <sup>3</sup> (mouse) LD50 (Ingestion): 292 mg/kg (rat)

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## 12. ECOLOGICAL INFORMATION

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<b>Environment</b>	Chlorine has very low stability in natural water as it readily oxidises inorganic and organic compounds. Chlorine is highly toxic to all forms of aquatic life. There is no potential for bioaccumulation or bioconcentration.
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## 13. DISPOSAL CONSIDERATIONS

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<b>Waste Disposal</b>	For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. For larger amounts, contact the manufacturer for additional information. Prevent contamination of drains or waterways as aquatic life may be threatened and environmental damage may result.
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

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## 14. TRANSPORT INFORMATION

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### NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

<b>Shipping Name</b>	None Allocated				
<b>UN No.</b>	None Allocated	<b>DG Class</b>	None Allocated	<b>Subsidiary Risk(s)</b>	None Allocated
<b>Packing Group</b>	None Allocated	<b>Hazchem Code</b>	None Allocated	<b>EPG</b>	None Allocated

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## 15. REGULATORY INFORMATION

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<b>Poison Schedule</b>	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).
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## 16. OTHER INFORMATION

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<b>Additional Information</b>	ABBREVIATIONS: ADB - Air-Dry Basis. BEI - Biological Exposure Indice(s) CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds. CNS - Central Nervous System. EINECS - European INventory of Existing Commercial chemical Substances. IARC - International Agency for Research on Cancer. M - moles per litre, a unit of concentration.
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**Product Name****ALPHASAN**

mg/m3 - Milligrams per cubic metre.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**Report Status**

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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**End of Report**