

# Material Safety Data Sheet

<b>HZ-2004</b>
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**Infosafe no.** DUPFX      **Issue Date** June 2004      **Status** ISSUED by  
DUPONT

**Classified as hazardous**

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

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**Product Name** HZ-2004  
**Product Use** Soil repellent barrier  
**Company Name** DuPont (Australia) Ltd (ABN 59 000 716 469)  
**Address** 7 Eden Park Drive  
 Macquarie Park NSW 2113  
**Emergency Tel. Telephone/Telex Number** (02) 9923 6275  
**Number** Tel: (02) 9923 6111 Fax: (02) 9923 6011  
**Other Names** None Listed  
**Other Information** 24 hour Medical Emergency: 1800 674 415

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DuPont New Zealand  
 98 Kerrs Road  
 Manukau  
 Auckland  
 New Zealand  
 Ph: (09) 268 5500 (24 Hours)  
 NZ Poisons Information Centre Ph: 0800 764766

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

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<b>Chemical Characterization</b>	Liquid, clear		
<b>Ingredients</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>
	Water	7732-18-5	60-90 %
	Isopropyl Alcohol	67-63-0	5-15 %
	Telomer B Phosphate Diethanolamine Salt (1:1:2)	65530-63-4	4-8 %
	Telomer B Phosphate Diethanolamine Salt (2:1:1)	65530-64-5	4-8 %
	Telomer B Phosphate Diethanolamine Salt (1:1:1)	65530-74-7	0.5-1 %

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## 3. HAZARDS IDENTIFICATION

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**Other Information** Toxic by inhalation.  
 Ingestion of Isopropyl Alcohol may cause irritation of the digestive tract with stomach pain, heartburn, nausea, vomiting, or diarrhea; however, there may be no symptoms at all. Inhalation, ingestion, or skin contact to Isopropyl Alcohol may cause nonspecific effects such as headache, nausea and weakness, flushing of the face, or low blood pressure. Higher exposures may cause central nervous system depression with dizziness, confusion, incoordination, drowsiness or unconsciousness or fatality from gross overexposure. Inhalation of spray or mist may cause nasal, throat, or lung irritation. Inhalation of large amounts of respirable particles may be toxic to the lungs. Symptoms may be modest initially, followed in hours by severe shortness of breath requiring prompt medical attention. Overexposure may be fatal.

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## 4. FIRST AID MEASURES

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<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
<b>Ingestion</b>	If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.
<b>Skin</b>	In case of contact, immediately wash skin with soap and water. Wash contaminated clothing before reuse.
<b>Eye</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
<b>Advice to Doctor</b>	Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mL water and mix thoroughly. Administer 5 mL/kg, or 350 mL for an average adult.

## 5. FIRE FIGHTING MEASURES

<b>Extinguishing Media</b>	Water Spray, Foam, Dry Chemical, CO <sub>2</sub> .
<b>Specific Hazards</b>	If heated above 200°C or in fire conditions, toxic decomposition products may be formed. These products may cause severe eye, nose, throat and lung irritation.
<b>Precautions in connection with Fire</b>	Evacuate personnel to a safe area. Wear self-contained breathing apparatus. Avoid breathing decomposition products.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Spills &amp; Disposal</b>	NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up. Soak up with sawdust, sand, oil dry or other absorbent material. Shovel or sweep up. Flush spill area with water.
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## 7. HANDLING AND STORAGE

<b>Handling</b>	Avoid breathing vapors or mist. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Avoid circumstances that produce respirable particles unless suitable ventilation and respirator are used.
<b>Storage</b>	Store in a well ventilated place. Keep container tightly closed. Freezing will affect physical condition but will not damage. Thaw and mix before using. Keep away from open flames and heated surfaces above 200 degrees C (392 deg F) as decomposition may occur.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

<b>Exposure Limits</b>	ISOPROPYL ALCOHOL: NOHSC TWA : 400.0 ppm, 983.0 mg/m <sup>3</sup> NOHSC STEL : 500.0 ppm, 1,230.0 mg/m <sup>3</sup> ACGIH TLV : 400.0 ppm, 8 hr TWA ACGIH STEL : 500.0 ppm, 15 min OSHA PEL : 400.0 ppm DUPONT AEL : 400.0 ppm, 8 & 12 hr TWA * AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence. Exposure Guideline Comments No AEL has been established for this product. Similar products with respirable aerosol toxicity have an AEL of 0.1 mg/m <sup>3</sup> to 1 mg/m <sup>3</sup> (8 hour TWA) for respirable size aerosol particles.
<b>Respiratory Protection</b>	Do not breath vapour or mist. Wear approved respiratory protection while applying HZ-2004.
<b>Eye Protection</b>	Wear safety glasses or coverall chemical splash goggles conforming to AS1336, AS1337.
<b>Hand Protection</b>	Where there is potential for skin contact have available and wear as appropriate impervious gloves conforming to AS2161.
<b>Body Protection</b>	Where there is potential for skin contact have available and wear as appropriate apron, pants, and jacket conforming to AS2919.

**Eng. Controls** Use only with adequate ventilation.  
DO NOT AEROSOLIZE OR ATOMIZE. VENT MIST AND FUMES OUTSIDE WORK AREA. In spray applications, do not use power or high pressure spray equipment. Spray only with garden or deck specific hand pump sprayer. USE AIRLESS TYPE SPRAY EQUIPMENT AT LESS THAN 60psi AND EXHAUST VENTILATION TO MINIMIZE WORKER EXPOSURE TO MISTS AND OVERSPRAY AND USE APPROVED RESPIRATORY EQUIPMENT (SEE PERSONAL PROTECTION SECTION).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Yellow-amber liquid  
**Odour** Alcoholic  
**Boiling Point** 100-C @ 760 mm Hg  
**Solubility in Water** Slight  
**Specific Gravity (H2O=1)** 1.05  
**pH Value** 7-9  
**Volatile Component** 90%  
**Flash Point** Does not flash  
**Flammability** Flash Point : Does not flash.

## 10. STABILITY AND REACTIVITY

**Hazardous Decomposition Products** Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles may be formed during combustion. These products may cause severe eye, nose, and throat irritation or toxic effects.

**Hazardous Reaction** Chemical stability:  
Stable at normal temperatures and storage conditions.  
Incompatibility with Other Materials:  
None reasonably foreseeable.  
Decomposition:  
Hazardous decomposition products including carbon dioxide, carbon monoxide, hydrogen fluoride, toxic gases or particles may be formed during combustion. These products may cause severe eye, nose, and throat irritation or toxic effects.  
Polymerisation:  
Polymerisation will not occur.

## 11. TOXICOLOGICAL INFORMATION

**Toxicology Information** ISOPROPYL ALCOHOL  
 Oral LD50 : 4,700 mg/kg Rat  
 Inhalation LC50, 8 hr : 16,000 ppm Rat  
 Dermal LD50 : 12,900 mg/kg Rabbit  
 The product is a mild skin irritant and a moderate eye irritant.  
 The following medical conditions may be aggravated by exposure: dermatitis and respiratory disease.  
 Can be absorbed through the skin in harmful amounts.  
 Contact will cause moderate to severe redness and swelling, itching, tingling sensation, and painful burning.  
 May cause injury to the cornea of the eyes.  
 Prolonged or repeated exposure may cause damage to any of the following organs/systems: liver.  
 Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights.  
 Aspiration may occur during swallowing or vomiting, resulting in lung damage.  
 May cause central nervous system depression with headache, stupor, uncoordinated or strange behaviour, or unconsciousness.  
 Irritating to the mouth, throat, and stomach.  
 May cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, coughing, and possibly accompanied by chest pain.  
 Prolonged or repeated skin contact may cause drying, cracking, or irritation.  
 Ingestion may cause headache, nausea, vomiting, dizziness, and drowsiness.  
 Swallowing significant amounts of substance could cause serious injury, even death.  
 Toxic effects in animals from exposure to the product by inhalation, ingestion or skin contact have not been determined. The effects attributable to Isopropanol may be expected.  
 Toxic effects observed in animals from exposure to Isopropanol by inhalation include microscopic and morphologic changes of the epithelial cells of the nose and middle ear

mucosa; and narcosis and fatty degeneration of the liver. No lung tumours were observed in a long-term inhalation exposure to Isopropanol.

Toxic effects observed in animals from exposure to Isopropanol by ingestion include anaesthetic effects and liver effects.

Continued voluntary drinking of 2.5% Aqueous Isopropanol through two successive generations of rats produced no reproductive effects. Developmental toxicity was observed in animals exposed to Isopropanol only at maternally toxic dose levels. Isopropanol does not produce genetic damage in bacterial or mammalian cell cultures but has not been tested in animals.

<b>Inhalation</b>	Do not breath vapour or mist. Inhalation may cause irritation of the nose and throat with sneezing, sore throat or runny nose. Large amounts of respirable particles may be toxic by inhalation with symptoms of shortness of breath requiring prompt medical assistance. Do not inhale mist, vapour or aerosol. Do not allow airless spray equipment to operate above 60psi. The spray equipment must not atomize or create a mist of the HZ-2004 solution.
<b>Ingestion</b>	Animal data indicates a low level of toxicity
<b>Skin</b>	Skin contact may cause skin irritation with discomfort or rash. There are rare inconclusive reports of human sensitization from skin contact with Isopropyl Alcohol.
<b>Eye</b>	Eye contact may cause eye irritation with discomfort, tearing or blurring of vision.
<b>Chronic Effects</b>	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

## 12. ECOLOGICAL INFORMATION

<b>Environment Protection</b>	Isopropyl Alcohol: The 96 hour LC50, fathead minnows: 3,200 mg/L.
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## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal</b>	Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State and Local regulations. Do not burn.
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## 14. TRANSPORT INFORMATION

<b>U.N. Number</b>	None Allocated
<b>Proper Shipping Name</b>	None Allocated
<b>DG Class</b>	None Allocated
<b>Hazchem Code</b>	None Allocated
<b>Packing Group</b>	None Allocated

## 15. REGULATORY INFORMATION

<b>Risk Phrase</b>	R23 Toxic by inhalation.
<b>Safety Phrase</b>	S7 Keep container tightly closed. S16 Keep away from sources of ignition - No smoking. S23 Do not breathe gas/fumes/vapour/spray S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S38 If insufficient ventilation, wear suitable respiratory equipment. S24/25 Avoid contact with skin and eyes.
<b>Hazard Category</b>	Toxic
<b>Packaging &amp; Labelling</b>	Contains: Telomer 'B' Phosphate Diethanolamines 8.5 - 17%

## 16. OTHER INFORMATION

<b>Contact Person/Point</b>	For sales, technical, and all product related enquiries contact Du Pont's North Sydney office on 9923 6111. Outside Sydney metropolitan area 1800 252 997 is a toll free number to North Sydney office to assist communications, ask for the customer service, Technical, or marketing personnel for the product family relative to the enquiry.
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Telephone numbers for other offices are:

North Sydney: (02) 9923-6111

Melbourne: (03) 9935-5666

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

**Poisons Schedule** Not Scheduled

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End of MSDS

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