



SAFETY DATA SHEET

PRODUCT NAME **PLUS-FIFTY C**

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product Name Plus-Fifty C

Recommended Use Fire Extinguishing Powder

Name of the Supplier Tyco Safety Products

Address 8 Henderson Place
Onehunga
Auckland 1061

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New Lynn
Auckland 0640

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Fax +64 9 2592485

Emergency Telephone '0800CHEMCALL' - 0800243622

2. HAZARD IDENTIFICATION

CLASSIFIED AS NON HAZARDOUS ACCORDING TO HAZARDOUS SUBSTANCES (CLASSIFICATION) REGULATIONS 2001

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Content
Sodium Bicarbonate	144-55-8	90-92%
Talc	14807-96-6	<5%
Magnesium Aluminium Silicate	8031-18-3	<4%
Methyl Hydrogen Polysiloxane	63148-57-2	0.2%
Blue Pigment	147-14-8	<0.1%

4. FIRST AID MEASURES

Eye Contact Flush with large amount of water. If irritation persists, seek medical attention.

Skin Contact Wash with soap and water. If irritation persists, seek medical attention.

Inhalation Remove victim to fresh air. Seek medical treatment if discomfort continues.

Ingestion If patient is conscious, give large amount of water and induce vomiting. Seek medical help.

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5. FIRE FIGHTING MEASURES

Special Fire Fighting Procedure	No specific measures are required as this product is a fire extinguishing medium.
Respiratory Protection	Dust mask where dustiness is prevalent, or TLV is exceeded. Use mechanical filter respirator if exposure is prolonged.
Protective Gloves	None normally needed. Use impervious gloves if irritation occurs.
Eye Protection	Chemical goggles recommended as mechanical barrier for prolonged exposure.
Other Protective Equipment	Use overalls if irritation occurs.

6. ACCIDENTAL RELEASE MEASURES

Accidental Released/ Spills	Clear up spillage and transfer to a container for recovery or disposal. Vacuum cleaning is recommended to minimize dust formation.
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7. HANDLING AND STORAGE

Precautions for safe handling	When handling this product use suitable containment methods to avoid generation of dust and local exhaust ventilation to limit personal exposure.
Other Precautions	Do not mix fire protection agents.
Incompatibility	Strong acids, NaK alloy, and $\text{NH}_4\text{H}_2\text{PO}_4$

8. EXPOSURE CONTROLS

Exposure Limits	Nuisance dust limit: OSHA TWA: 15 mg/m^3 ACGIH TLV-TWA: 10 mg/m^3
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Ventilation:

Local Exhaust: Not Applicable

Mechanical (General): Recommended

Personal Protective Equipment:

Protective Gloves: None normally needed. Use impervious gloves if irritation occurs.

Eye Protection: Chemical goggles recommended as mechanical barrier for prolonged exposure.

Other Protective Equipment: Use overalls if irritation occurs.

Respiratory Protection: Dust mask where dustiness is prevalent, or TLV is exceeded. Use mechanical filter respirator if exposure is prolonged.

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9. PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance	Blue Powder
Odor	Odorless
pH	8.6 (at 20°C) (1% wt/wt dissolved in water)
Flammability	Non Flammable
Explosive Properties	Not Explosive
Oxidizing Properties	Not an oxidizer
Solubility:	
Water Solubility	Completely Soluble
Sodium Bicarbonate	96 g/L (at 20°C)
Fat Soluble	Not Soluble
Auto Ignition Temperature	Does not ignite

10. STABILITY AND REACTIVITY

Materials to avoid Strong Acids, NaK alloy and $\text{NH}_4\text{H}_2\text{PO}_4$

Hazardous decomposition products:

- Normally stable
- Hazardous polymerization will not occur
- Combustion or decomposition product include Carbon Dioxide.

11. TOXICOLOGICAL INFORMATION

Threshold Limit Value Nuisance dust limit OSHA TWA: $15\text{mg}/\text{m}^3$ ACGIH TLV-TWA: $10\text{mg}/\text{m}^3$

Routes of Entry: Eye Contact: Mildly irritating for short periods of time.

Skin Contact: May be mildly irritating.

Inhalation: Treat as a mineral dust. Irritant to the respiratory tract. Transient cough, shortness of breath.

Ingestion: Not an expected route of entry.

Signs & Symptoms – Acute: Mildly irritating to eyes, skin and respiratory tract.

Overexposure

Signs & Symptoms – Chronic: Lungs, Gastrointestinal, and kidney can be affected.

Overexposure

Medical Conditions generally Respiratory Problem

Aggravated by exposure

12. ECOLOGICAL INFORMATION

Potential Environmental Interactions: Avoid unnecessary release of this substance to the environment. In the event of large spillage, advise appropriate authority. Carbon Dioxide from decomposition or reaction is a global warming gas.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Export the substance from New Zealand as waste ; or Treat the substance so that it is no longer a hazardous substance ; or Discharge the substance into the environment so that, after reasonable mixing, the concentration of the substance in an environmental medium does not exceed any relevant tolerable exposure limit and/or environmental exposure limit set for the substance or any of its components.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005 NZS 5433:2007, UN, IMDG OR IATA

Shipping Name	None Allocated	DG Class	None Allocated	Subsidiary Risk(s)	None Allocated
UN No.	None Allocated	Hazchem Code	None Allocated	EPG	None Allocated

15. REGULATORY INFORMATION

Approval Code: HSR002573

Group Name: Fire Fighting Chemicals Group Standard 2006

HSNO Controls: Refer to the ERMA website for more information: www.ermanz.govt.nz

Section 16: Other Information

Additional Information

ABBREVIATIONS:

ADB - Air-Dry Basis. BEI - Biological Exposure Indices 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. 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 SDS 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 SDS 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.

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Report Status

This document has been compiled by the retailer of the product and serves as the retailers Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to the retailer 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 retailer.

While Tyco has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Tyco 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 SDS.

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