

PRODUCT NAME **ZINC (NYRSTAR HOBART)****1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Supplier Name	NYRSTAR HOBART
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Web Site	http://www.nyrstar.com/
Synonym(s)	0001 TO 0450 - PRODUCT CODE • 7000 TO 7500 - PRODUCT CODE • 9100 TO 9200 - PRODUCT CODE • GOB ZINC • HIGH GRADE (HG) ZINC • PRIME WESTERN GRADE (PWG) ZINC • SPECIAL HIGH GRADE (SHG) ZINC • SPELTER • ZN
Use(s)	LABORATORY APPLICATIONS • LABORATORY REAGENT

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

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

UN No.	None Allocated	DG Class	None Allocated	Subsidiary Risk(s)	None Allocated
Pkg Group	None Allocated	Hazchem Code	None Allocated	EPG	None Allocated

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
ZINC	Zn	7440-66-6	>98.5%
LEAD	Pb	7439-92-1	<1.4%
ALUMINIUM	Al	7429-90-5	<1%
TRACE ELEMENTS	Not Available	Not Available	<0.1%

4. FIRST AID MEASURES

Eye	Exposure is considered unlikely unless solid is cut or damaged and dusts generated. Hold eyelids apart and flush the eye continuously with running water for 15 minutes.
Inhalation	Exposure is considered unlikely. If inhaled (solid is cut or damaged and dusts generated) remove from contaminated area.
Skin	Exposure is considered unlikely unless solid is cut or damaged and dusts generated. Gently flush affected areas with water and seek medical attention if irritation develops.
Ingestion	For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). Due to product form and application, ingestion is considered unlikely.
Advice to Doctor	Treat symptomatically

5. FIRE FIGHTING MEASURES

Flammability	Non flammable. May evolve zinc oxides when heated to decomposition.
Fire and Explosion	Non flammable. No fire or explosion hazard exists.
Extinguishing	Non flammable. Prevent contamination of drains or waterways.
Hazchem Code	None Allocated

PRODUCT NAME **ZINC (NYRSTAR HOBART)****6. ACCIDENTAL RELEASE MEASURES****Spillage** Collect and reuse where possible. Wear PVC/rubber gloves and dust-proof goggles.**7. STORAGE AND HANDLING****Storage** Store in a dry, well ventilated area removed from acids, alkalis and halogenated hydrocarbons.**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.**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Exposure Stds	Ingredient	Reference	TWA		STEL	
			ppm	mg/m3	ppm	mg/m3
	Aluminium (metal dust)	NOHSC (AUS)	--	10.0	--	--
	Lead, inorganic dusts & fumes (as Pb)	NOHSC (AUS)	--	0.15	--	--

Biological Limits	Ingredient	Reference	Determinant	Sampling Time	BEI
	LEAD	ACGIH BEI	Lead in blood	Not critical	30 ug/100 ml

Engineering Controls Use in well ventilated areas.**PPE** Wear dust-proof goggles and rubber or PVC gloves. At high dust levels, wear a Class P1 (Particulate) respirator.**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	BLUE/WHITE TO GREY METALLIC SOLID (25 KG SLABS)	Solubility (water)	INSOLUBLE
Odour	ODOURLESS	Specific Gravity	7.13
pH	NOT AVAILABLE	% Volatiles	NOT AVAILABLE
Vapour Pressure	1 mm Hg @ 487°C	Flammability	NOT AVAILABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT AVAILABLE
Boiling Point	907°C	Upper Explosion Limit	NOT RELEVANT
Melting Point	419°C	Lower Explosion Limit	NOT RELEVANT
Evaporation Rate	NOT AVAILABLE	Autoignition Temperature	NOT AVAILABLE

10. STABILITY AND REACTIVITY**Material to Avoid** Incompatible with acids (eg. hydrochloric acid), alkalis (eg. sodium hydroxide) and halogenated hydrocarbons. Contact with moist air may result in the formation of a white coating (zinc oxide) on the metal surface.**Decomposition** May evolve zinc oxides when heated to decomposition.

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11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Low toxicity. Exposure to zinc dust may cause irritation of the eyes, skin and mucous membranes. Chronic exposure to dusts may cause pneumoconiosis. When heated, zinc oxide fumes may be evolved. Inhalation of freshly formed zinc oxide fumes may result in the development of a flu-like illness termed metal fume fever. Use safe work practices to avoid eye or skin contact and dust/fume inhalation. Lead is a cumulative poison but due to the low concentration present in this product adverse health effects are not anticipated.
Eye	Low to moderate irritant. Contact with dust may result in mechanical irritation. However, due to product form (solid), contact with dusts is not anticipated unless product is cut or damaged.
Inhalation	Low to moderate irritant. Due to product form (solid), a dust inhalation is not anticipated unless this product is cut or damaged and dusts generated. When heated zinc oxide fume may be evolved. Fume may cause metal fume fever, with flu-like symptoms such as headache and nausea.
Skin	Non irritant. Prolonged or repeated contact may result in mild irritation due to mechanical action.
Ingestion	Ingestion is considered unlikely due to product form.
Toxicity Data	No LD50 data available for this product.

12. ECOLOGICAL INFORMATION

Environment	Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.
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13. DISPOSAL CONSIDERATIONS

Waste Disposal	Collect and place in sealable containers. Contact the manufacturer for additional information.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

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

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

15. REGULATORY INFORMATION

Poison Schedule	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).
AICS	All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information	RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.
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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.

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.

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

ppm - Parts Per Million.

TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

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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.

COLOUR RATING SYSTEM: RMT has assigned all Chem Alert reports a colour rating of Green, Amber or Red for the sole purpose of providing users with a quick and easy means of determining the hazardous nature of a product. Safe handling recommendations are provided in all Chem Alert reports so as to clearly identify how users can control the hazards and thereby reduce the risk (or likelihood) of adverse effects. As a general guideline, a Green colour rating indicates a low hazard, an Amber colour rating indicates a moderate hazard and a Red colour rating indicates a high hazard.

While all due care has been taken by RMT in the preparation of the Colour Rating System, it is intended as a guide only and RMT does not provide any warranty in relation to the accuracy of the Colour Rating System. As far as is lawfully possible, RMT accepts no liability or responsibility whatsoever for the actions or omissions of any person in reliance on the Colour Rating System.

Report Status

This Chem Alert report has been independently compiled by RMT's scientific department utilising the original Material Safety Data Sheet ('MSDS') for the product provided to RMT by the manufacturer. The information is based on the latest chemical and toxicological research 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.

This Chem Alert report does not constitute the manufacturer's original MSDS and is not intended to be a replacement for same. It is provided to subscribers of Chem Alert as a reference tool only, is not all-inclusive and does not represent any guarantee as to the properties of the product. 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 Chem Alert report, 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 Chem Alert report.

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End of Report