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MATERIAL SAFETY DATA SHEET

REQUIRED UNDER USDL SAFETY AND HEALTH REGULATIONS FOR SHIP REPAIRING, SHIPBUILDING, AND SHIPBREAKING (29CFR 1915-16-17)

SECTION I

Manufacturer's Name Hilmar Ingredients	Emergency Telephone No. (209) 667-6076
Address 9001 North Lander Ave Hilmar, CA 95324 USA	
Issued:	8/10/2009
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PART CODE	CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS
350009 350010	4-O-β-D-Galactopyranosyl-D-glucose hydrate Lactose Monohydrate	Hilmar™ 5110 Refined Edible Lactose 100 mesh
CHEMICAL FAMILY		FORMULA
<i>Disaccharide Sugar</i>		$C_{12}H_{22}O_{11} \cdot H_2O$
CAS No: 64044-51-5		

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
<i>NOT APPLICABLE</i>		

SECTION III - PHYSICAL DATA

BOILING POINT <i>NOT APPLICABLE</i>	Density 1.525@20°C
VAPOR PRESSURE (MM HG.) <i>NOT APPLICABLE</i>	PERCENT VOLATILE BY VOLUME (%) 0
SOLUBILITY IN WATER <i>Soluble</i>	EVAPORATION RATE <i>NOT APPLICABLE</i>
APPEARANCE <i>Free flowing uniform white crystalline powder.</i>	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (°C. UNLESS OTHERWISE SPECIFIED.)	METHOD USED	FLAMMABLE LIMITS	LEL	UEL
<i>NOT APPLICABLE</i>		<i>NOT APPLICABLE</i>		
EXTINGUISHING MEDIA <i>Carbon Dioxide, Dry Chemicals</i>				
SPECIAL FIRE FIGHTING PROCEDURES <i>NOT APPLICABLE</i>				
UNUSUAL FIRE AND EXPLOSION HAZARDS <i>As with any organic dust, may be explosive if mixed with air in critical proportions. Maintain normal good housekeeping.</i>				

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE <i>Not established.</i>	
EFFECTS OF OVEREXPOSURE <i>Unknown. May be irritating to skin and eyes.</i>	
EMERGENCY AND FIRST AID PROCEDURES Possible allergen to those allergic to bovine dairy products. <i>Skin: Rinse with soap and water. Contact physician if irritation persists.</i> <i>Eyes: Flush copiously with water. Contact physician if irritation persists.</i>	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	*	
INCOMPATIBILITY (MATERIALS TO AVOID) Strong Oxidising agents			
HAZARDOUS DECOMPOSITION PRODUCTS <i>Not Found</i>			
HAZARDOUS POLYMERIZATION	MAY OCCUR WILL NOT OCCUR	*	CONDITIONS TO AVOID

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED <i>Flush away with water.</i>	
WASTE DISPOSAL METHOD <i>In accordance with local, state, and federal regulations</i>	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Sp (SPECIFY TYPE) Optional - NIOSH / MSHA approved respiratory mask		
VENTILATION	<i>Local Exhaust usual</i>	SPECIAL
RECOMMENDED	<i>Mechanical (General) usual</i>	OTHER
PROTECTIVE GLOVES	EYE PROTECTION <i>Splash Goggles</i>	
OTHER PROTECTIVE EQUIPMENT		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store under ambient warehouse conditions. <i>Transport and store in clean, dry area.</i>	
OTHER PRECAUTIONS	

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