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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 Supercedes: 7/8/2009	

PART CODE	CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS
350008	4-O-β-D-Galactopyranosyl-D-glucose hydrate Lactose Monohydrate	Hilmar™ 5100 Refined Edible Natural Lactose
CHEMICAL FAMILY Disaccharide Sugar		FORMULA C₁₂H₂₂O₁₁ · H₂O
CAS No: 64044-51-5		

SECTION II - HAZARDOUS INGREDIENTS

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

SECTION III - PHYSICAL DATA

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

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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

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) <i>Strong Oxidising agents</i>			
HAZARDOUS DECOMPOSITION PRODUCTS <i>Not Found</i>			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	*	

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) <i>Optional - NIOSH / MSHA approved respiratory mask</i>		
VENTILATION RECOMMENDED	<i>Local Exhaust usual</i> <i>Mechanical (General) usual</i>	SPECIAL 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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