

# Material Safety Data Sheet

Revision Date: 04/05/10



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## I. PRODUCT IDENTIFICATION

**Catalog Number / Product Name:** 31809 / Carbohydrate System Check Mix  
**Revision Number:** 8  
**Intended use:** For Laboratory use only

## II. HAZARD IDENTIFICATION

### Emergency Overview:

**Routes of Entry:** Inhalation, Skin Contact, Eye Contact, Ingestion  
**Target Organs Potentially Affected By Exposure:** None Known.  
**Chemical Interactions That Change Toxicity:** None Known  
**Medical Conditions Aggravated By Exposure:** No medical conditions affected by exposure.

### Immediate (Acute) Health Effects by Route of Exposure:

**Inhalation Irritation:** No hazard in normal industrial use.  
**Skin Contact:** No hazard in normal industrial use.  
**Eye Contact:** No hazard in normal industrial use.  
**Ingestion Irritation:** No hazard in normal industrial use.  
**Ingestion Toxicity:** No hazard in normal industrial use.

### Long-Term (Chronic) Health Effects:

**Carcinogenicity:** No data.  
**Reproductive and Developmental Toxicity:** No data available to indicate product or any components present at greater than 0.1% may cause birth defects.  
**Inhalation:** Upon prolonged and/or repeated exposure, no hazard in normal industrial use.  
**Skin Contact:** Unlikely to cause irritation even on repeated contact.

## III. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	EINEC #	% Composition
water	7732-18-5		98.300000
d(+)-maltose monohydrate	6363-53-7		0.450000
D-lactose monohydrate	5989-81-1		0.440000
sucrose	57-50-1		0.400000
d-glucose	50-99-7		0.210000
d-fructose	57-48-7		0.200000

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## IV. FIRST-AID MEASURES

**Inhalation:** This material does not present a hazard if inhaled. Remove individual to fresh air after an airborne exposure if any symptoms develop, as a precautionary measure. Remove to fresh air.

**Eyes:** None expected to be needed, however, use an eye wash to remove a chemical from your eye regardless of the level of hazard.

**Skin Contact:** Wash with soap and water.

**Ingestion:** No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this MSDS.

## V. FIRE FIGHTING MEASURES

**Fire Fighting Methods and Protection:** Will not burn, no special instructions available. Use methods appropriate for surrounding materials.

**Hazardous Combustion Products:** None Known

## VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section VIII of this MSDS.

**Methods for Clean-up:** Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container

## VII. HANDLING AND STORAGE

**Handling Technical Measures and Precautions:** No special handling instructions due to toxicity.

## VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

### United States:

Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
water	7732-18-5	ND		No TLV	No PEL established
d(+)-maltose monohydrate	6363-53-7	ND		No TLV	No PEL established
D-lactose monohydrate	5989-81-1	ND		No TLV	No PEL established
sucrose	57-50-1	ND		No TLV	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
d-glucose	50-99-7	ND		No TLV	No PEL established
d-fructose	57-48-7	ND		No TLV	No PEL established

### United Kingdom:

Chemical Name	CAS No.	EINEC No.	WEL-STEL	WEL-TWA
water	7732-18-5		No data.	No data.
d(+)-maltose monohydrate	6363-53-7		No data.	No data.
D-lactose monohydrate	5989-81-1		No data.	No data.
sucrose	57-50-1		No data.	No data.
d-glucose	50-99-7		No data.	No data.
d-fructose	57-48-7		No data.	No data.

### France:

Chemical Name	CAS No.	EINEC No.	VLCTs-STEL	VME-TWA
water	7732-18-5		No data.	No data.
d(+)-maltose monohydrate	6363-53-7		No data.	No data.
D-lactose monohydrate	5989-81-1		No data.	No data.
sucrose	57-50-1		No data.	No data.
d-glucose	50-99-7		No data.	No data.
d-fructose	57-48-7		No data.	No data.

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## Germany:

Chemical Name	CAS No.	EINEC No.	VELs
water	7732-18-5		No data.
d(+)-maltose monohydrate	6363-53-7		No data.
D-lactose monohydrate	5989-81-1		No data.
sucrose	57-50-1		No data.
d-glucose	50-99-7		No data.
d-fructose	57-48-7		No data.

## Personal Protection:

**Engineering Measures:** Local exhaust ventilation is recommended when generating excessive levels of vapors from handling or thermal processing.

**Respiratory Protection:** No respiratory protection required under normal conditions of use.

**Eye Protection:** Wear safety glasses when handling this product.

**Skin Protection:** Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

## IX. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Odor:</b>	None
<b>pH:</b>	No data available.
<b>Melting Point:</b>	0.0 °C
<b>Flash Point:</b>	No data available.
<b>Specific Gravity:</b>	0.99821 g/cm <sup>3</sup> at 20 °C
<b>Evaporation Rate:</b>	No data available.
<b>Odor Threshold:</b>	No data available.
<b>Solubility:</b>	Not determined
<b>VOC % by weight:</b>	No data available.
<b>Molecular Weight:</b>	No data available.

## X. STABILITY AND REACTIVITY:

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<b>Stability:</b>	Stable under normal conditions.
<b>Materials to Avoid / Chemical Incompatibility:</b>	None Known
<b>Hazardous Decomposition Products:</b>	None Known

## XI. TOXICOLOGICAL INFORMATION:

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### Component Toxicological Data:

#### NIOSH:

Chemical Name	CAS No.	LD50/LC50
Water	7732-18-5	Oral LD50 Rat >90 mL/kg

### Component Carcinogenic Data:

#### OSHA:

Chemical Name	CAS No.
No data available	

#### ACGIH:

Chemical Name	CAS No.
No data available.	

#### NIOSH:

Chemical Name	CAS No.
No data available.	

#### NTP:

Chemical Name	CAS No.
No data available.	

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## IARC:

Chemical Name	CAS No.	Group No.
No data.		Group 1
No data.		Group 2A
No data.		Group 2B

## XII. ECOLOGICAL INFORMATION:

<b>Overview:</b>	This material is not expected to be harmful to the ecology.
<b>Mobility:</b>	No data
<b>Persistence:</b>	No data
<b>Bioaccumulation:</b>	No data
<b>Degradability:</b>	No data
<b>Ecological Toxicity Data:</b>	0

## XIII. DISPOSAL CONSIDERATIONS:

<b>Disposal Methods:</b>	Dispose of by waste water treatment following Federal, State, Local, or Provincial regulations.
<b>Waste Disposal of Packaging:</b>	Comply with all Local, State, Federal, and Provincial Environmental Regulations.

## XIV: TRANSPORTATION INFORMATION:

<b>United States:</b>	
<b>DOT Proper Shipping Name:</b>	DOT Not Regulated
<b>UN Number:</b>	Not regulated

<b>International:</b>	
<b>IATA Proper Shipping Name:</b>	IATA Not Regulated
<b>UN Number:</b>	Not regulated.

<b>Marine Pollutant:</b>	No
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## XV. REGULATORY INFORMATION:

### United States:

Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
water	7732-18-5	-	-	-	X
d(+)-maltose monohydrate	6363-53-7	-	-	-	-
D-lactose monohydrate	5989-81-1	-	-	-	-
sucrose	57-50-1	-	-	-	X
d-glucose	50-99-7	-	-	-	X
d-fructose	57-48-7	-	-	-	X

### The following chemicals are listed on CA Prop 65:

Chemical Name	CAS #	Regulation
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### State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
water	7732-18-5	-	-	-	-
d(+)-maltose monohydrate	6363-53-7	-	-	-	-
D-lactose monohydrate	5989-81-1	-	-	-	-
sucrose	57-50-1	-	X	X	-
d-glucose	50-99-7	-	-	-	-
d-fructose	57-48-7	-	-	-	-

### EU Directives Classification:

#### Hazard Symbols

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## **XVI: ADDITIONAL INFORMATION**

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**Prior Version Date:** 03/11/10

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