



SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 05/18/2001  
Date Updated: 10/29/1999  
Version 1.0

### Section 1 - Product and Company Information

Product Name	CYTOCHROME C FROM HORSE HEART		
Product Number	C7752		
Brand	Sigma Chemical		
Company	Sigma-Aldrich		
Street Address	3050 Spruce Street		
City, State, Zip, Country	St. Louis, MO, 63103, US		
Technical Phone:	314 771 5765	Emergency Phone:	414 273 3850 Ext.5996
Fax:	800 325 5052		

### Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
CYTOCHROME C FROM BISON HEART	9007-43-6	No
Formula		
Synonyms	Cromoci, Cytores, Ferricytochrome C, Ferrocyclochrome C, Hematin-protein, Horse-cytochrome C, Horse heart cytochrome C, Landrax, Myohematin, Nitrosylferricytochrome C	

### Section 3 - Hazards Identification

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

**Oral Exposure**  
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**Inhalation Exposure**  
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

**Dermal Exposure**  
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

**Eye Exposure**  
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### Section 5 - Fire Fighting Measures

Autoignition Temp: N/A      Flammability: N/A

**Extinguishing Media**  
Suitable  
Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

**Firefighting**  
**Protective Equipment**  
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s)**  
Wear protective equipment.

**Methods for Cleaning Up**  
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

### Section 8 - Exposure Controls / PPE

**Personal Protective Equipment**  
**Other**  
Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

### Section 9 - Physical/Chemical Properties

**Appearance**      **Form**  
Fibres

**Molecular Weight:** N/A

Property	Value
pH	N/A
BP/BP Range	N/A
MP/MP Range	300 °C
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	< 10 %
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A
Autoignition Temp	N/A
Solubility	
Solvent:	10 mg/ml H2O

### Section 10 - Stability and Reactivity

**Stability**  
**Conditions of Instability**  
Light sensitive

**Hazardous Polymerization**  
**Hazardous Polymerization**  
Will not occur.

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### Section 11 - Toxicological Information

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**Route of Exposure**  
**Multiple Routes**  
May be harmful by inhalation, ingestion, or skin absorption.

**Conditions Aggravated by Exposure**  
The toxicological properties have not been thoroughly investigated.

**RTECS Number:** HA5365000

**Toxicity Data**  
Intraperitoneal - Rat: 6250 MG/KG (LD50)  
Intravenous - Mouse: >3 GM/KG (LD50)

**Chronic Exposure - Reproductive Hazard**

<u>Species</u>	<u>Dose</u>	<u>Route of Application</u>	<u>Exposure Time</u>
Rat	250 MG/KG	Oral	(1-22D PREG)

Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

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### Section 12 - Ecological Information

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### Section 13 - Disposal Considerations

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**Appropriate Method of Disposal of Substance or Preparation**  
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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### Section 14 - Transport Information

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**DOT**  
**Proper Shipping Name:** None  
**Non-Hazardous for Transport:** This substance is considered to be non-hazardous for transport.

**IATA**  
**Proper Shipping Name:** None  
**Non-Hazardous for Air Transport:** Non-hazardous for air transport.

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### Section 15 - Regulatory Information

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**United States Regulatory Information**  
**SARA 313 Listed:** No

**TSCA Inventory Item:** Yes

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### Section 16 - Other Information

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**Warranty**  
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 1999 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.