



Special Effects Equipment & Supplies

14525 Bessemer St. Van Nuys, CA. 91411

(818) 994-3049

For Chemical Emergency call Infotrac @ 1-800-535-5053

## Material Safety Data Sheet

### Section 1 - Product Information

Product Name: A Blood  
Chemical Name: Trade Secret

The following information is for 100% concentration of the hazardous component of A Blood. This component only makes up 5% of the final solution, thus significantly lowering the risks. However, a patch test on the skin should be performed to determine skin sensitivity.

### Section 2 - Hazardous Ingredients

Chemical Name	CAS#	Percentage
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Trade Secret	333-20-0	5%
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Exposure Limits	Permissible Exposure Limit:	594 mg/kg Oral toxicity (mouse)
	Ceiling Limits:	N/A
	Short Term Exposure Limit:	N/A
	Can be hazardous to skin?:	Yes

### Section 3 - Physical/Chemical Characteristics

Boiling Point	N/A	Solubility in Water	100%
Vapor Pressure (mm Hg)	N/A	Specific Gravity (H <sub>2</sub> O = 1)	N/A
Vapor Density (Air = 1)	N/A	Melting Point	N/A
Appearance and Odor/ Odor threshold	Clear, colorless, odorless liquid.		
Evaporation Rate (Butyl Acetate = 1)	N/A	PH	N/A
Freezing Point	N/A		

### Section 4 - Fire and Explosion Data

Lower Explosive/Flammability Limit	N/A	Flash Point	N/A
Upper Explosive/Flammability Limit	N/A	Autoignition Temperature	N/A
Extinguishing Media	N/A		
Fire Fighting Measures	Not flammable. Fire hazard in presence of oxidizing materials.		
Fire or Explosion Hazards	Slightly explosive in presence of oxidizing materials. When heated to decomposition it emits very toxic fumes, possibly cyanide gas.		

### Section 5 - Reactivity Data

<b>Chemical Stability</b>	Stable.
<b>Incompatibility</b>	Reactive with oxidizing agents, acids.
<b>Hazardous Decomposition or Byproducts</b>	Sensitive to light. Slowly decomposes on exposure to light. Also incompatible with active halogen compounds. Incompatible with acids (mineral, non-oxidizing, e.g. chromic acid, hypochlorous acid, nitric acid, sulfuric acid), acids (organic, e.g. acetic acid, benzoic acid, formic acid, methanoic acid, oxalic acid), oxidizers (chlorates, peroxides, nitrates, nitrites). Contact with acids liberates toxic cyanide gas or hydrogen sulfide. Moisture sensitive.
<b>Hazardous Polymerization</b>	Will not occur.

### Section 6 - Health Hazard Data

<b>Routes of Entry</b>	Absorbed through skin, skin contact, eye contact, ingestion, or inhalation.
<b>Health Hazards</b>	Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation (lung irritant). Potential chronic health effects include: Hazardous in case of ingestion. Slightly hazardous in case of skin contact (sensitizer). Developmental toxicity; The substance is toxic to the nervous system. The substance may be toxic to blood, cardiovascular system, urinary system, thyroid. Repeated or prolonged exposure to the substance can produce target organs damage.
<b>Carcinogenicity</b>	Not listed.
<b>Signs and Symptoms of Exposure</b>	<p><i>Skin:</i> Causes skin irritation. May cause ulcers, discoloration, eczema. It can be absorbed through the skin. Repeated or prolonged skin contact can cause dermatitis.</p> <p><i>Eyes:</i> Causes eye irritation and swelling of the eye lids. It may cause blurred vision.</p> <p><i>Inhalation:</i> May cause respiratory tract and mucous membrane irritation. Symptoms may include coughing, chest pain, difficulty breathing.</p> <p><i>Ingestion:</i> May be harmful if swallowed. May cause gastrointestinal tract irritation with nausea, ulceration or bleeding from stomach, and vomiting. It may also affect behavior/central nervous system (hallucinations, delirium, confusion, distorted perceptions, disorientation, toxic psychosis, convulsions, muscle weakness), respiration (dyspnea), cardiovascular system (hypotension, cardiovascular collapse). Ingestion may also cause skin eruptions. Prolonged or repeated ingestion may affect metabolism, thyroid (goiter, hypothyroidism), blood, and urinary system in addition to behavior/central nervous system.</p>
<b>Medical conditions generally aggravated by exposure</b>	N/A
<b>Emergency and First Aid Procedures</b>	<p><i>Eye Contact:</i> Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.</p> <p><i>Skin Contact:</i> In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.</p> <p><i>Serious Skin Contact:</i> Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.</p> <p><i>Inhalation:</i> If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.</p> <p><i>Ingestion:</i> Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.</p>

### Section 7 - Precautions for Safe Handling and Use

<b>Spill or Release Data</b>	<i>Small Spill:</i> Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
	<i>Large Spills:</i> Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. The following personal protection should be worn in case of large spills: Splash goggles, full suit, dust respirator, boots, gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling the product.
	<b>Waste Disposal Method</b>
	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
	<b>Handling and Storage</b>
	Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 77F. Moisture sensitive. Sensitive to light. Store in light-resistant containers.
<b>Other Precautions</b>	N/A

### Section 8 - Control Measures

<b>Respiratory Protection</b>	Dust respirator. Be sure to use an approved/certified respirator or equivalent.
<b>Protective Gloves</b>	Gloves should be worn.
<b>Eye Protection</b>	Splash goggles.
<b>Other Protective Equip.</b>	Lab coat.
<b>Ventilation</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Work/Hygienic Practices</b>	Be sure to wash hands after handling.

To the best of our knowledge, the information contained above is accurate. However, neither the above named supplier nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained above.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described above, we cannot guarantee that these are the only hazards that exist.

Prepared: October 2006



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## Material Safety Data Sheet

### Section 1 - Product Information

**Product Name:** B Blood

**Chemical Name:** Trade Secret

The following information is for 100% concentration of the hazardous component of B Blood. This component only makes up 4% of the final solution, thus significantly lowering the risks. However, a patch test on the skin should be performed to determine skin sensitivity.

### Section 2 - Hazardous Ingredients

<u>Chemical Name</u>	<u>CAS#</u>	<u>Percentage</u>
Trade Secret	7705-08-0	4%
<b>Exposure Limits</b>	<b>Permissible Exposure Limit:</b>	In air: 1 mg/m <sup>3</sup> (TWA) soluble iron salt as Fe
	<b>Ceiling Limits:</b>	N/A
	<b>Short Term Exposure Limit:</b>	N/A
	<b>Can be absorbed through skin?:</b>	No

### Section 3 - Physical/Chemical Characteristics

<b>Boiling Point</b>	N/D	<b>Solubility in Water</b>	Soluble in water.
<b>Vapor Pressure (mm Hg)</b>	N/A	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	N/A
<b>Vapor Density (Air = 1)</b>	N/A	<b>Melting Point</b>	N/D
<b>Appearance and Odor / Odor threshold</b>	Clear liquid with a yellow brown color. Slight odor of hydrochloric acid.		
<b>Evaporation Rate (Butyl Acetate = 1)</b>	N/D	<b>PH</b>	N/D
<b>Freezing Point</b>	N/A		

### Section 4 - Fire and Explosion Data

<b>Lower Explosive/Flammability Limit</b>	N/A	<b>Flash Point</b>	N/A
<b>Upper Explosive/Flammability Limit</b>	N/A	<b>Autoignition Temperature</b>	N/A
<b>Extinguishing Media</b>	Water, dry chemical, foam or CO <sub>2</sub> . Do not allow water runoff to enter sewers or waterways		
<b>Fire Fighting Measures</b>	Not considered to be a fire hazard. Irritating hydrogen chloride fumes may form in fire.		
	In the event of a fire, wear full protective clothing and NIOSH - approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.		
<b>Fire or Explosion Hazards</b>	Not considered to be an explosion hazard.		

### Section 5 - Reactivity Data

<b>Chemical Stability</b>	Stable under ordinary conditions of use and storage.
<b>Incompatibility</b>	Metals, allyl chloride, sodium, potassium. Will react with water to produce toxic and corrosive fumes.
<b>Hazardous Decomposition or Byproducts</b>	Emits toxic fumes of chloride when heated to decomposition.
<b>Hazardous Polymerization</b>	Will not occur.

### Section 6 - Health Hazard Data

<b>Routes of Entry</b>	Inhalation, ingestion, skin contact, and eye contact.	
<b>Health Hazards</b>	Danger! Corrosive. Causes burns to any area of contact. Harmful if swallowed or inhaled. Affects the liver.	
<b>Carcinogenicity</b>	N/A	
<b>Signs and Symptoms of Exposure</b>	<b>Inhalation:</b> Extremely destructive to tissues of the mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.	
	<b>Ingestion:</b> Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach. Can cause sore throat, vomiting, diarrhea. Low toxicity in small quantities but larger doses (30 mg/kg) may cause nausea, vomiting and diarrhea. Pink urine discoloration is a strong indicator of iron poisoning. Liver damage, coma and death may follow, sometimes delayed as long as three days.	
	<b>Skin Contact:</b> Corrosive. Symptoms of redness, pain and severe burn can occur.	
	<b>Eye Contact:</b> Corrosive. Contact can cause blurred vision, redness, pain and severe tissue burns.	
	<b>Chronic Exposure:</b> Repeated ingestion may cause liver damage. Prolonged exposure of the eyes may cause discoloration.	
	<b>Medical conditions generally aggravated by exposure</b>	No information found.
	<b>Emergency and First Aid Procedures</b>	<b>Inhalation:</b> Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
		<b>Ingestion:</b> If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
<b>Skin Contact:</b> Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.		
<b>Eye Contact:</b> Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.		

### Section 7 - Precautions for Safe Handling and Use

<b>Spill or Release Data</b>	Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8.
	<i>Spills:</i> Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.
	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations.
	Dispose of container and unused contents in accordance with federal, state and local requirements.
<b>Handling and Storage</b>	Keep in a tightly closed container, stored in a cool, dry, ventilated area.
	Protect against physical damage. Isolate from incompatible substances.
	Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.
<b>Other Precautions</b>	N/A

### Section 8 - Control Measures

<b>Respiratory Protection</b>	If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.	
	Warning!: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.	
	<b>Protective Gloves</b>	Protective gloves should be worn.
	<b>Eye Protection</b>	Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible.
	<b>Other Protective Equip.</b>	Clean body-covering clothing should be worn.
	<b>Ventilation</b>	A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, <i>Industrial Ventilation, A Manual of Recommended Practices</i> , most recent edition, for details.
<b>Work/Hygienic Practices</b>	Maintain eye wash fountain and quick-drench facilities in work area.	
	Be sure to wash hands before eating, drinking, smoking or using the restroom.	

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