

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 12.27.2014**Simulated Blood, Type-AB****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Simulated Blood, Type-AB**Manufacturer/Supplier Article number:** SB9012SS**Recommended uses of the product and restrictions on use:** Laboratory**Manufacturer Details:**

AquaPhoenix Scientific, Inc.  
 860 Gitts Run Road  
 Hanover, PA 17331  
 1-717-632-1291

**Emergency telephone number:****ChemTel: (24-hour)**

+1(800)255-3924

+1(813)248-0585 (International)

**SECTION 2: Hazards identification****Classification of the substance or mixture:**

Not classified for physical or health hazards under GHS.

**Signal word:** None**Hazard statements:**

None

**Precautionary statements:**

None

**Other Non-GHS Classification:** None**SECTION 3: Composition/information on ingredients****Ingredients:**

<b>Ingredients:</b>		
CAS 7732-18-5	Deionized Water	80.06 %
CAS Proprietary	Non-Hazardous Color Additive	0.5 %
CAS 10043-52-4	Calcium Chloride	4.44 %
CAS 7784-27-2	Aluminum Nitrate	15 %
Percentages are by weight		

**SECTION 4: First aid measures****Description of first aid measures****After inhalation:**

Loosen clothing as necessary and position individual in a comfortable position. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 12.27.2014**Simulated Blood, Type-AB**

symptoms appear.

**After skin contact:**

Wash affected area with soap and water. Seek medical attention if irritation persists or if concerned.

**After eye contact:**

Protect unexposed eye. Immediately flush eyes with water for at least 15 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Immediately get medical assistance.

**After swallowing:**

Dilute mouth with water or milk. Seek medical attention immediately.

**Most important symptoms and effects, both acute and delayed:**

Nausea. Headache. Shortness of breath. Irritation.

**Indication of any immediate medical attention and special treatment needed:**

If seeking medical attention provide SDS document to physician.

**SECTION 5: Firefighting measures****Extinguishing media****Suitable extinguishing agents:**

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

**Unsuitable extinguishing agents:** None**Special hazards arising from the substance or mixture:**

Dust can form an explosive mixture in air.

**Advice for firefighters:****Protective equipment:**

Wear protective eyewear, gloves, and clothing. Refer to Section 8.

**Additional information (precautions):**

Avoid contact with skin, eyes and clothing. Avoid generating dust.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

**Environmental precautions:** None**Methods and material for containment and cleaning up:**

If necessary use trained response staff or contractor. Clean up spills immediately. Absorb with suitable absorbent material such as sand or earth and containerize for disposal. Refer to Sections 5, 8, and 10. Observe precautions for protective equipment.

**Reference to other sections:** None**SECTION 7: Handling and storage****Precautions for safe handling:**

Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Minimize dust generation. Avoid ingestion and inhalation. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Do not eat, drink, smoke, or use personal products when handling chemical substances.

**Conditions for safe storage, including any incompatibilities:**

Keep container tightly closed in a cool, dry, well-ventilated area. Store away from incompatible materials. Refer

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.27.2014

**Simulated Blood, Type-AB**

to Section 5.

**SECTION 8: Exposure controls/personal protection**

<b>Control parameters:</b>	, , OSHA PEL TWA (Total Dust) 15 mg/m <sup>3</sup> (50 mppcf*), , , ACGIH TLV TWA (inhalable particles) 10 mg/m <sup>3</sup> .
<b>Appropriate engineering controls:</b>	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Normal ventilation is adequate.
<b>Respiratory protection:</b>	Not required under normal conditions of use. Normal ventilation is adequate.
<b>Protection of skin:</b>	Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation.
<b>Eye protection:</b>	Safety glasses with side shields or goggles.
<b>General hygienic measures:</b>	Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Perform routine housekeeping to prevent dust generation. Before re-wearing, wash contaminated clothing. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

**SECTION 9: Physical and chemical properties**

<b>Appearance (physical state, color):</b>	Red liquid	<b>Explosion limit lower:</b> <b>Explosion limit upper:</b>	Not determined Not determined
<b>Odor:</b>	Odorless	<b>Vapor pressure at 20°C:</b>	Not determined
<b>Odor threshold:</b>	Not determined	<b>Vapor density:</b>	Not determined
<b>pH-value:</b>	Not determined	<b>Relative density:</b>	Approx. 1
<b>Melting/Freezing point:</b>	Not determined	<b>Solubilities:</b>	Soluble in water.
<b>Boiling point/Boiling range:</b>	Not determined	<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>Flash point (closed cup):</b>	Not determined	<b>Auto/Self-ignition temperature:</b>	Not determined
<b>Evaporation rate:</b>	Not determined	<b>Decomposition temperature:</b>	Not determined
<b>Flammability (solid, gaseous):</b>	Not determined	<b>Viscosity:</b>	a. Kinematic: Not determined b. Dynamic: Not determined
<b>Density at 20°C:</b>	Not determined		

**SECTION 10: Stability and reactivity****Reactivity:**

None under normal processing.

**Chemical stability:**

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 12.27.2014**Simulated Blood, Type-AB**

Stable under normal conditions.

**Possible hazardous reactions:** None**Conditions to avoid:**

Excessive heat. Dust generation. Incompatible materials. Refer to Section 5.

**Incompatible materials:**

Strong oxidizers.

**Hazardous decomposition products:**

Carbon oxides. Irritating and highly toxic gases or fumes.

**SECTION 11: Toxicological information****Acute Toxicity:** No additional information.**Chronic Toxicity:** No additional information.**Skin corrosion/irritation:** No additional information.**Serious eye damage/irritation:** No additional information.**Respiratory or skin sensitization:** No additional information.**Carcinogenicity:** No additional information.**Germ cell mutagenicity:** No additional information.**Reproductive Toxicity:** No additional information.**STOT-single and repeated exposure:** No additional information.**Additional toxicological information:**

No additional information.

**SECTION 12: Ecological information****Ecotoxicity:** No additional information.**Persistence and degradability:** No additional information.**Bioaccumulative potential:** No additional information.**Mobility in soil:** No additional information.**Other adverse effects:** No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of empty containers as unused product.

**SECTION 14: Transport information****US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Dangerous Goods

**Limited Quantity Exception:**

None

**Bulk:****RQ (if applicable):** None**Non Bulk:****RQ (if applicable):** None

**Safety Data Sheet**

according to 29CFR1910/1200 and GHS Rev. 3

**Initial preparation date:** : 12.27.2014**Simulated Blood, Type-AB****Proper shipping Name:** Not Dangerous Goods.**Hazard Class:** None**Packing Group:** Not Dangerous Goods.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**Proper shipping Name:** Not Dangerous Goods.**Hazard Class:** None**Packing Group:** Not Dangerous Goods.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

None of the ingredients are listed.

**SARA Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

**RCRA (hazardous waste code):**

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act) :**

All ingredients are listed.

**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):**

None of the ingredients are listed.

**Proposition 65 (California):****Chemicals known to cause cancer:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**Canada****Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

**SECTION 16: Other information**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages

**Safety Data Sheet**

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**Initial preparation date:** : 12.27.2014**Simulated Blood, Type-AB**

incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material. Note.

**NFPA:** 0-0-0**HMIS:** 0-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:**

IMDG	International Maritime Code for Dangerous Goods.
PNEC.	Predicted No-Effect Concentration (REACH).
CFR	Code of Federal Regulations (USA)
SARA	Superfund Amendments and Reauthorization Act (USA).
RCRA.	Resource Conservation and Recovery Act (USA).
TSCA.	Toxic Substances Control Act (USA).
NPRI	National Pollutant Release Inventory (Canada).
DOT	US Department of Transportation.
IMDG	International Maritime Code for Dangerous Goods.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
IATA	International Air Transport Association.
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service (division of the American Chemical Society).
NFPA	National Fire Protection Association (USA).
HMIS	Hazardous Materials Identification System (USA).
WHMIS	Workplace Hazardous Materials Information System (Canada).
DNEL	Derived No-Effect Level (REACH).
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