according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.27.2014

Simulated Blood, Type-A

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: Simulated Blood, Type-A

Manufacturer/Supplier Article number: SB9010SS

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:

| Ingredients: | | | | | |
|---------------------------|------------------------------|--------|--|--|--|
| CAS 7784-27-2 | Aluminum Nitrate | 15 % | | | |
| CAS 7732-18-5 | Deionized Water | 84.5 % | | | |
| CAS Proprietary | Non-Hazardous Color Additive | 0.5 % | | | |
| 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 symptoms appear.

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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 to Section 5.

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SECTION 8: Exposure controls/personal protection





Control parameters: , , OSHA PEL TWA (Total Dust) 15 mg/m³ (50 mppcf*).

, , ACGIH TLV TWA (inhalable particles) 10 mg/m3.

Appropriate engineering controls: 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.

Respiratory protection: Not required under normal conditions of use. Normal ventilation is

adequate.

Protection of skin: Select glove material impermeable and resistant to the substance. Select

glove material based on rates of diffusion and degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: 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

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

SECTION 10: Stability and reactivity

Reactivity:

None under normal processing.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions: None

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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: Non Bulk:

RQ (if applicable): None RQ (if applicable): None

Proper shipping Name: Not Dangerous Proper shipping Name: Not Dangerous

Goods. Goods.

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Hazard Class: None Hazard Class: None

Packing Group: Not Dangerous Goods.

Marine Pollutant (if applicable): No

Marine Pollutant (if applicable): No

additional information. additional information. **Comments:** None **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):

13473-90-0 Aluminum Nitrate.

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 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.

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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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