Page E1 of E2

#### Section 1

# **Chemical Product and Company Identification**

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

# For laboratory use only. Not for drug, food or household use.

Innov	vating	y Scie	ence	® by Aldo	n Corporation
			-		

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Product SIMULATED BLOOD, TYPE A+	
· · · · · · · · · · · · · · · · · · ·	
Synonyms Simulated Blood, Type A Positive / Mother	
Section 2 Hazards Identification	
Signal word: WARNING Pictograms: GHS07 Target organs: Blood <b>GHS Classification:</b> Acute toxicity, oral (Category 5) Skin irritation (Category 2) Eye irritation (Category 2A) <b>GHS Label information: Hazard statement(s):</b> H303: May be harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation.	Precautionary statement(s): P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water and soap. P332+P313: If skin irritation occurs: Get medical attention. P362+P364: Take off contaminated clothing and wash it before reuse. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention. P312: Call a POISON CENTER or doctor if you feel unwell.

221 Rochester Street Avon, NY 14414-9409

(585) 226-6177

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3	Composition / Information	on on Ingredients		
Chemical Name		CAS#	%	EINECS
Water Aluminum nitrate Non-hazardous p	, nonahydrate roprietary ingredients	7732-18-5 7784-27-2 Undisclosed	90.1% 9.3% 0.6%	231-791-2 236-751-8 (anhydrous CAS # 13473-90-0) Undisclosed
Section 4	First Aid Measures			

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

#### Section 5

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

**Fire Fighting Measures** 

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

### Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection						
Exposuro Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits:	Aluminum nitrate	None established	None established	None established			

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirator.								
Section 9	Physical & Chemical Prop	perties						
	ata not available. ble. : Approximately 0°C (32°F) (water) ximately 100°C (212°F) (water)	ate (Water = 1): <1			Data not available e: Data not available. e.			
Section 10	Stability & Reactivity							
Incompatible mater	Stable Excessive temperatures to ca ials: Reducing agents, organic osition products: Nitrogen os	ause evaporation. materials.	us polymerization:	Will not occur.				
Section 11	Toxicological Information							
Skin corrosion/irrit: Serious eye damag Respiratory or skin Gern cell mutageni Carcinogenity: Dat NTP: No component IARC: No componen OSHA: No componen OSHA: No componen Reproductive toxici STOT-single exposi STOT-repeated exp Aspiration hazard: Potential health effi Inhalation: May be h Skin: Contact with s Eyes: Causes seriou	Acute toxicity: Aluminum nitrate: Oral-rat LD50: 3,671 mg/kg         Skin corrosion/irritation: Data not available         Serious eye damage/irritation: Data not available         Respiratory or skin sensitization: Data not available         Germ cell mutagenicity: Data not available         Carcinogenity: Data not available         Orrengenity: Data not available         NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.         IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.         OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.         Reproductive toxicity: Data not available         STOT-single exposure: Data not available         STOT-repeated exposure: Data not available         Aspiration hazard: Data not available         Potential health effects:         Inhalation: May be harmful if inhaled.         Ingestion: May be harmful if swallowed.         Skin: Contact with skin may cause irritation.         Eyes: Causes serious eye irritation.         Eyes: Causes serious eye irritation.         Eyes: Causes serious eye irritation.							
Section 12	Ecological Information							
Toxicity to fish: No data available         Toxicity to daphnia and other aquatic invertebrates: No data available         Toxicity to daglae: No data available         Persistence and degradability: No data available         Bioaccumulative potential: No data available         Mobility in soil: No data available         PBT and vPvB assessment: No data available         Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.         Section 13       Disposal Considerations         These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.								
Section 14	Transport Information (U	S DOT / CANAD	IA IDG)					
UN/NA number: Hazard class: Not Exceptions: Not	t applicable Pack applicable 2012	ping name: N king group: No ERG Guide #	ot applicable	Reportable Q	luantity: No	Mar	ine pollutant: No	
Section 15	Regulatory Information							
	to be listed if the CAS number for			PCPA code	DSL	NDEL		
Compone Aluminum nitrate, no		Listed	CERLCA (RQ) Not listed	RCRA code Not listed	Listed	NDSL Not listed		
Section 16	Other Information							
The information contained dent determinations of s	ed herein is furnished without warra uitability and completeness of infor ncy for Research on Cancer, OSHA	mation from all source	ces to assure proper use	of these materials and	the safety and he	ealth of employees.	ed by them and must make indepen- NTP: National Toxicology Program, sure, RE: Repeated Exposure,	

ERG: Emergency Response Guidebook.

Revision 06/2015

#### Section 1

#### **Chemical Product and Company Identification**

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# Innovating Science<sup>®</sup> by Aldon Corporation

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221 Rochester Street Avon, NY 14414-9409 (585) 226-6177

**CHEMTREC 24 Hour Emergency** Phone Number (800) 424-9300 For laboratory use only

Not for drug, food or household use.

Product	SIMULATED BLOOD, TYPE O-	
Synonyms	Simulated Blood, Type O Negative / Child	
Section 2	Hazards Identification	
to the Glob Chemicals. Signal word Pictograms Target orga GHS Class GHS Label	ance or mixture has not been classified as hazardous according hally Harmonized System (GHS) of Classification and Labeling of d: None required s: No symbol required ans: None known ification: None required information: Hazard statement: None required ary statement: None required	Supplemental information: Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3	Composition / Information	on Ingredients			
Chemical Name		CAS #	%	EINECS	
Water Non-hazardous pro	oprietary ingredients	7732-18-5 Undisclosed	>99% <1%	231-791-2 Undisclosed	
Section 4	First Aid Measures				

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

#### Section 5

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

**Fire Fighting Measures** 

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

#### Section 6 **Accidental Release Measures**

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection						
Exposuro Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits:	No components listed	None established	None established	None established			

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirator.								
Section 9	Physical & Chemical Pro	perties						
	quid. ta not available. ole. Approximately 0°C (32°F) (water) kimately 100°C (212°F) (water)	Evaporation rat Flammability (s Explosion limit Vapor pressure Vapor density ( Relative density (	te (Water = 1): <1 solid/gas): Data not : s: Lower / Upper: D (mm Hg): 14 (water Air = 1): 0.7 (water) Specific gravity): Appr Complete in water.	oata not available )	Auto-ignitic Decomposi Viscosity: I Molecular fe	efficient: Data n on temperature: tion temperature Data not available ormula: Mixture veight: Mixture	Data not availab Data not availa	
Section 10	Stability & Reactivity							
Incompatible materi		ause evaporation. ucing agents may d		Vill not occur.				
Section 11	Toxicological Information	l						
Acute toxicity: Data Skin corrosion/irrita Serious eye damage Respiratory or skin Germ cell mutageni Carcinogenity: Data NTP: No component IARC: No component OSHA: No component Reproductive toxici STOT-single expose STOT-repeated expo Aspiration hazard: Potential health effe Inhalation: May be ha Skin: Repeated or pi Eyes: Contact may or Signs and symptom	Section 11       Toxicological Information         Acute toxicity: Data not available       Skin corrosion/irritation: Data not available         Serious eye damage/irritation: Data not available       Respiratory or skin sensitization: Data not available         Respiratory or skin sensitization: Data not available       Germ cell mutagenicity: Data not available         Germ cell mutagenicity: Data not available       Germ cell mutagenicity: Data not available         Carcinogenity: Data not available       NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.         IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.         Reproductive toxicity: Data not available         STOT-single exposure: Data not available         STOT-single exposure: Data not available         STOT-single exposure: Data not available         Aspiration hazard: Data not available         Potential health effects:         Inhalation: May be harmful if inhaled.         Ingestion: May be harmful if inhaled.         Stin: Repeated or prolonged contact with skin may cause irritation.							
Section 12	Ecological Information							
Toxicity to algae: No Persistence and deg Mobility in soil: No Other adverse effec Section 13 These disposal guid regulations may be	and other aquatic invertebra o data available gradability: No data available data available ts: An environmental hazard o Disposal Considerations delines are intended for the different. Dispose of in acc	Bioaccumul PBT and vP annot be excluded disposal of catalo ordance with all I	lative potential: No vB assessment: No in the event of unpro og-size quantities or ocal, state and fede	data available essional handling or nly. Federal regula	ations may ap			
Section 14	Transport Information (U	S DOT / CANAD	A TDG)					
UN/NA number: Hazard class: No Exceptions: Not	t applicable Paci applicable 2012	pping name: No king group: No PERG Guide # 1	t applicable	Reportable Q	luantity: No	Mari	ne pollutant:	No
Section 15	Regulatory Information to be listed if the CAS number for	the anhydrous form in	on the Inventory list					
Compone		TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL		
· · · · ·	with the following agencies	Listed	Not listed	Not listed	Listed	Not listed		
Section 16	Other Information							
The information contained dent determinations of se	ed herein is furnished without warra uitability and completeness of infor icy for Research on Cancer, OSHA	mation from all source	es to assure proper use	of these materials and	the safety and he	alth of employees.	NTP: National Toxi	cology Program,

ERG: Emergency Response Guidebook.

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Section 1

# **Chemical Product and Company Identification**

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# **CHEMTREC 24 Hour Emergency**

Innovating Science<sup>®</sup> by Aldon Corporation 221 Rochester Street Avon, NY 14414-9409 (585) 226-6177

Phone Number (800) 424-9300 For laboratory use only Not for drug, food or household use.

Product SIMULATED BLOOD, TYPE AB+ Synonyms Simulated Blood, Type AB Positive / Sample X Section 2 Hazards Identification Signal word: WARNING Precautionary statement(s): Pictograms: GHS07 P264: Wash hands thoroughly after handling. Target organs: Blood P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water and soap. P332+P313: If skin irritation occurs: Get medical attention. P362+P364: Take off contaminated clothing and wash it before reuse. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **GHS Classification:** P337+P313: If eye irritation persists: Get medical attention. Acute toxicity, oral (Category 5) P312: Call a POISON CENTER or doctor if you feel unwell. Skin irritation (Category 2) Eye irritation (Category 2A) GHS Label information: Hazard statement(s): H303: May be harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Informa	tion on Ingredients		
Chemical Name	CAS #	%	EINECS
Water Calcium nitrate, tetrahydrate Aluminum nitrate, nonahydrate Non-hazardous proprietary ingredients	7732-18-5 13477-34-4 7784-27-2 Undisclosed	80.1% 10.0% 9.3% 0.6%	231-791-2 233-332-1 236-751-8 (anhydrous CAS # 13473-90-0) Undisclosed
Section / Eirst Aid Mossures			

#### section 4 FIRST AID Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES SERIOUS EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

#### Section 5

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

**Fire Fighting Measures** 

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

#### Section 6 **Accidental Release Measures**

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection						
Exposuro Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits:	Calcium nitrate	None established	None established	None established			

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirator.								
Section 9	Physical & Chemical Prop	erties						
• •	quid. ata not available. ble. : Approximately 0°C (32°F) (water) ximately 100°C (212°F) (water)	Evaporation ra Flammability ( Explosion limi Vapor pressur Vapor density Relative density	Evaporation rate ( Water = 1): <1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water) Relative density (Specific gravity): Approximately 1.0 (water) Solubility(ies): Complete in water.			ion temperature: sition temperature Data not available formula: Mixture	Data not available e: Data not available. e.	
Section 10	Stability & Reactivity							
Chemical stability:       Stable       Hazardous polymerization:       Will not occur.         Conditions to avoid:       Excessive temperatures to cause evaporation.       Incompatible materials:       Ammonia, hydrozine and other reducing agents.         Hazardous decomposition products:       Nitrogen oxides.								
Section 11	Toxicological Information							
Skin corrosion/irrit: Serious eye damag Respiratory or skin Germ cell mutageni Carcinogenity: Dat NTP: No componen IARC: No componen OSHA: No componen Reproductive toxici STOT-single expose STOT-repeated exp Aspiration hazard: Potential health effi Inhalation: May be hi Skin: Contact with s Eyes: Causes seriou Signs and symptom	Acute toxicity: Calcium nitrate: Oral-rat LD50: 3,900 mg/kg / Aluminum nitrate: Oral-rat LD50: 3,671 mg/kg Skin corrosion/irritation: Data not available Respiratory or skin sensitization: Data not available Gern cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available Nation May be harmful if inhaled. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if inwalcowed. Skin: Contact with skin may cause irritation. Eyes: Causes serious eye irritation. Eyes: Causes serious eye irritation. Eyes: Causes serious eye irritation. Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.							
Section 12	Ecological Information							
Construction       Construction         Toxicity to fish: No data available       Toxicity to daphnia and other aquatic invertebrates: No data available         Toxicity to algae: No data available       Bioaccumulative potential: No data available         Persistence and degradability: No data available       Bioaccumulative potential: No data available         Mobility in soil: No data available       PBT and vPvB assessment: No data available         Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.         Section 13       Disposal Considerations         These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.         Section 14       Transport Information (US DOT / CANADA TDG)								
UN/NA number:	Not applicable Ship	oing name: N	ot Regulated					
Hazard class: Not Exceptions: Not	t applicable Pack applicable 2012	ing group: N	0	Reportable Q	uantity: No	Mar	ine pollutant: No	
Section 15	Regulatory Information							
A chemical is considered Compone	to be listed if the CAS number for t	he anhydrous form TSCA	is on the Inventory list. CERLCA (RQ)	RCRA code	DSL	NDSL		
Calcium nitrate (solid Aluminum nitrate, no	)	Listed Listed	Not listed Not listed	Not listed Not listed	Listed Listed	Not listed Not listed		
Section 16	Other Information							
							ed by them and must make indepen- NTP: National Toxicology Program,	

dent determination contained neterin is furnished windout warranty of any kind. Employers should use this mormation only as a supplement to other mormation genered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

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Section 1

Chemical Product and Company Identification

# CHEMTREC 24 Hour Emergency

### Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use.

Innovating Science<sup>®</sup> by Aldon Corporation "cutting edge science for the classroom"

221 Rochester Street Avon, NY 14414-9409 (585) 226-6177

Product	SIMULATED BLOOD, TYPE B-	
Synonyms	Simulated Blood, Type B Negative / Sample Y	
Section 2	Hazards Identification	
Pictograms Target orga GHS Classi Acute toxicit Skin irritation Eye irritation GHS Label I H303: May b H315: Cause	ans: Blood	Precautionary statement(s): P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water and soap. P332+P313: If skin irritation occurs: Get medical attention. P361+P364: Take off immediately all contaminated clothing and wash it before reuse. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention. P312: Call a POISON CENTER or doctor if you feel unwell.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3	Composition / Information on	Ingredients			
Chemical Name		CAS #	%	EINECS	
Water Calcium nitrate, tetrah Non-hazardous propri		7732-18-5 13477-34-4 Undisclosed	89.4% 10.0% 0.6%	231-791-2 233-332-1 Undisclosed	
Section 4	First Aid Measures				

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

#### Section 5

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

**Fire Fighting Measures** 

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

### Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

ERG: Emergency Response Guidebook.

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Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Limits.	Calcium nitrate	None established	None established	None established		

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirator.								
Section 9	Physical & Chemical Pro	perties						
	ata not available. ble. : Approximately 0°C (32°F) (water) ximately 100°C (212°F) (water)	Flammability (s Explosion limit Vapor pressure Vapor density ( Relative density (	Evaporation rate (Water = 1): <1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water) Relative density (Specific gravity): Approximately 1.0 (water) Solubility(ies): Complete in water.				Data not availab e: Data not avail e.	
Section 10	Stability & Reactivity							
Chemical stability:       Stable       Hazardous polymerization:       Will not occur.         Conditions to avoid:       Excessive temperatures to cause evaporation.       Incompatible materials:       Ammonia, hydrozine and other reducing agents.         Hazardous decomposition products:       Nitrogen oxides.       Nitrogen oxides.								
Section 11	Toxicological Information							
Acute toxicity: Calcium nitrate: Oral-rat LD50: 3,900 mg/kg         Skin corrosion/irritation: Data not available         Serious eye damage/irritation: Data not available         Respiratory or skin sensitization: Data not available         Germ cell mutagenicity: Data not available         Carcinogenity: Data not available         Carcinogenity: Data not available         NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.         IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.         Reproductive toxicity: Data not available         STOT-single exposure: Data not available         STOT-repeated exposure: Data not available         Aspiration hazard: Data not available         Aspiration hazard: Data not available         Aspiration hazard: Data not available         Reproductive toxicity: Data not available         Aspiration hazard: Data not available         Aspiration hazard: Data not available         Aspiration hazard: Data not available         Reproductive toxicity: Suba not available         Aspiration hazard: Data not available         Aspiration hazard: Data not available         Aspiration hazard: Data not available         Recontextime tere         Recontextime tere								
Section 12	tion: RTECS #: Calcium nitra Ecological Information							
Section 12       Ecological information         Toxicity to fish: No data available       Toxicity to daphnia and other aquatic invertebrates: No data available         Toxicity to algae: No data available       Bioaccumulative potential: No data available         Persistence and degradability: No data available       Bioaccumulative potential: No data available         Mobility in soil: No data available       PBT and vPvB assessment: No data available         Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.       Section 13         Disposal Considerations       These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.         Section 14       Transport Information (US DOT / CANADA TDG)								
UN/NA number:	Not applicable Ship	ping name: No	ot Regulated					
Hazard class: Not Exceptions: Not	ot applicable Pack applicable 2012	ing group: No ERG Guide #	t applicable	Reportable (	Quantity: No	Mar	ine pollutant:	No
Section 15	Regulatory Information	the enhydrous form !	on the Inventory list					
A chemical is considered Compone	d to be listed if the CAS number for	TSCA	cerlca (RQ)	RCRA code	DSL	NDSL		
Calcium nitrate (solic		Listed	Not listed	Not listed	Listed	Not listed		
Section 16	Other Information							
The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make indepen- dent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.								

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Section 1

# **Chemical Product and Company Identification**

# Innovating Science<sup>®</sup> by Aldon Corporation

"cutting edge science for the classroom"

221 Rochester Street Avon, NY 14414-9409 (585) 226-6177 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

For laboratory use only. Not for drug, food or household use.

Product	SIMULATED ANTI-SERUM ANTI-A	
Synonyms	Simulated Anti-A Serum / Anti-A Serum	
Section 2	Hazards Identification	
Pictograms Target orga GHS Classi Eye irritation GHS Label		Precautionary statement: P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3	Composition / Information	omposition / Information on Ingredients					
Chemical Name		CAS #	%	EINECS			
Water Sodium salicylate FD&C Blue #1 (C		7732-18-5 54-21-7 3844-45-9	91.99% 8.00% 0.001%	231-791-2 200-198-0 223-339-8			
Section 4	First Aid Measures						

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

#### Section 5

Suitable Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire.

**Fire Fighting Measures** 

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

## Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances. Light sensitive.

Section 8	Exposure Controls / Personal Protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Limits.	Sodium salicylate	Not established	Not established	Not established		

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirator.									
Section 9	Physical & Chemical Prop	erties							
	ata not available. ble. : Approximately 0°C (32°F) (water) ximately 100°C (212°F) (water)	Flammability ( Explosion limi Vapor pressur Vapor density Relative density	Evaporation rate (Water = 1): <1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available. /apor pressure (mm Hg): 14 (water) /apor density (Specific gravity): Approximately 1.0 (water) Solubility(ies): Complete in water. Partition coefficient: Data not available Auto-ignition temperature: Data not available. Decomposition temperature: Data not available. Nolecular formula: Mixture Nolecular weight: Mixture				Data not availab e: Data not avail e.		
Section 10	Stability & Reactivity								
Conditions to avoid	Chemical stability:       Stable       Hazardous polymerization:       Will not occur.         Conditions to avoid:       Excessive temperatures which cause evaporation.       Protect from light.         Incompatible materials:       Strong oxidizers, strong acids.								
Hazardous decomp	osition products: Carbon oxid	es, sodium oxide	S.						
Section 11	Toxicological Information								
Acute toxicity: Oral-rat LD50: 11,625 mg/kg (acute toxicity estimate) Skin corrosion/irritation: Data not available Serious eye damage/irritation: Eyes-rabbit - mild irritant Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: This product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: This product oper sent at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available Potential health effects: Inhalation: Not expected to be a health hazard. Ingestion: May be harmful by ingestion. Skin: Contact causes irritation. Eyes: Contact may cause irritation. Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards.									
Section 12	Ecological Information								
Toxicity to fish:       LC50 - Pimephales promelas (fathead minnow) - 1,370 mg/l - 96 h [Sodium salicylate]         Toxicity to daphnia and other aquatic invertebrates:       No data available         Toxicity to algae:       No data available         Persistence and degradability:       No data available         Bioaccumulative potential:       No data available         Mobility in soil:       No data available         PBT and vPvB assessment:       No data available         Other adverse effects:       An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.         Section 13       Disposal Considerations         These disposal guidelines are intended for the disposal of catalog-size quantities only.       Federal regulations may apply to empty container. State and/or local									
Section 14	Transport Information (U			· · ·					
UN/NA number: Hazard class: Not Exceptions: Not	applicable Pack 2012	oing name: N ing group: N ERG Guide #	U	Reportable Qua	antity: No	Mar	ine pollutant:	No	
Section 15	Regulatory Information	ha anhudi f	in the law of the						
A chemical is considered Compone	to be listed if the CAS number for	he anhydrous form	is on the Inventory list. CERLCA (RQ)	RCRA code	DSL	NDSL			
Sodium salicylate	nii	Listed	Not listed	Not listed	Listed	Not listed			
Section 16	Other Information								
The information contained dent determinations of s	ed herein is furnished without warra uitability and completeness of inforr ncy for Research on Cancer, OSHA	nation from all source	ces to assure proper use	of these materials and	the safety and h	ealth of employees.	NTP: National Toxi	cology Program,	

Revision 06/2015

#### Section 1

# **Chemical Product and Company Identification**

# Page E1 of E2

# Innovating Science<sup>®</sup> by Aldon Corporation

"cutting edge science for the classroom"

221 Rochester Street Avon, NY 14414-9409 (585) 226-6177 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only.

Not for drug, food or household use.

Product	SIMULATED ANTI-SERUM ANTI-B	
Synonyms	Simulated Anti-B Serum / Anti-B Serum	
Section 2	Hazards Identification	
to the Glob Chemicals Signal wor Pictogram Target org GHS Class GHS Label	tance or mixture has not been classified as hazardous according bally Harmonized System (GHS) of Classification and Labeling of s. rd: None required is: No symbol required ans: None known sification: None required I information: Hazard statement: None required hary statement: None required	Supplemental information: Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Information	tion on Ingredients			
Chemical Name	CAS #	%	EINECS	
Water Sodium sulfate FD&C Yellow #5 (C.I. No. 19140)	7732-18-5 7757-82-6 1934-21-0	84.992% 15.000% 0.008%	231-791-2 231-820-9 217-699-5	
Section 4 First Aid Measures				

**INGESTION:** MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE TRANSIENT IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE TRANSIENT IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

#### Section 5

Suitable Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire.

**Fire Fighting Measures** 

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

## Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8	Exposure Controls / Personal Protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Linits.	Sodium sulfate	None established.	None established.	None established.		

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9	Physical & Chemical Prop	perties		
	a not available. e Approximately 0°C (32°F) (water) mately 100°C (212°F) (water)	Evaporation rate (Water = 1): <1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water) Relative density (Specific gravity): Approximately 1.0 (water) Solubility(ies): Complete in water.	Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture	
Section 10	Stability & Reactivity			

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatibilities with other materials: Molten active metals, including aluminum and magnesium, acids.

Hazardous decomposition products: Oxides of sulfur.

#### Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: >10,000 mg/kg Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity: Data not available STOT-repeated exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available Potential health effects: Inhalation: May be harmful if inhaled. Ingestion: May be harmful if wallowed. Skin: May cause mild irritation. Eyes: May cause mild irritation. E								
Section 12 Ecological Information								
Toxicity to fish: Gambusia affinis (Fish, fresh water) LC50: 120 mg/l/96 hours [Sodium sulfate]         Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea) EC50: 630 mg/l/96 hours [Sodium sulfate]         Toxicity to algae: Chlorella pyrenoidosa (Algae) EC199: 57,700 mg/l/8 days [Sodium sulfate]         Persistence and degradability: No data available       Bioaccumulative potential: No data available         Mobility in soil: No data available       PBT and vPvB assessment: No data available         Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.								
Section 13	Disposal Consider	ations						
These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency. Section 14 Transport Information (US DOT / CANADA TDG)								
Section 14	Transport Informa	tion (US D	OT / CANAL	DA TDG)				
Hazard class: Not applicablePackingExceptions: Not applicable2012 EF		g name: Not Regulated group: Not applicable RG Guide # Not applicable		Reportable Quantity: No		Marine pollutant: No		
Section 15 Regulatory Information								
A chemical is considered	d to be listed if the CAS nur	nber for the a	inhydrous form	is on the Inventory list.				
Compone	ent		TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	
Sodium sulfate			Listed	Not listed	Not listed	Listed	Not listed	
Section 16	Other Information							
The information contain dent determinations of s	ed herein is furnished witho suitability and completeness	of informatio	on from all sour	ces to assure proper use	of these materials and	I the safety and he	ealth of employees.	ed by them and must make indepen- NTP: National Toxicology Program, sure, RE: Repeated Exposure,

ERG: Emergency Response Guidebook. Revision 06/2015