GENERAL STORAGE CODE GREEN

Page E1 of E2

Section 1

Identification

"Cutting edge science for the classroom" by Aldon (585) 226-6177

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

Not for drug, food or household use.

| Product | SIMULATED BLOOD, TYPE O- | |
|--|--|--|
| Synonyms | Simulated Blood, Type O Negative / Victim | |
| Section 2 | Hazards identification | |
| to the Glob Chemicals. Signal word Pictograms Target orga GHS Classi GHS Label | ance or mixture has not been classified as hazardous according ally Harmonized System (GHS) of Classification and Labeling of d: None required ins: None required information: 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. Wea protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell. |

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 | Composition / information on | ingredients | | | |
|------------------------|------------------------------|----------------------|--------------|----------------------|--|
| Chemical Name | | CAS # | % | EINECS | |
| Water Food Coloring | | 7732-18-5 Mixture | >99% 0.6% | 231-791-2 Mixture | |
| 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 Fire fighting measures

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

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 prot | ection | | |
|------------------|-----------------------------------|------------------|------------------|------------------|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) |
| Exposure Linits. | 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.

| Section 9 | Physical and chemical prop | perties | | | | | |
|---|---|--|--|---|--|---|---|
| Appearance: Re Odor: No odor. Odor threshold: pH: Data not ava Melting / Freezing po | ed liquid. Data not available. ailable. oint: Approximately 0°C (32°F) (water) oproximately 100°C (212°F) (water) | Evaporation r Flammability Explosion lim Vapor pressur Vapor density Relative density | ate (Water = 1): <1 (solid/gas): Data not its: Lower / Upper: I re (mm Hg): 14 (wate r (Air = 1): 0.7 (water) r (Specific gravity): Appr : Complete in water. | Data not available r) | Auto-igniti Decompos Viscosity: Molecular | • | e: Data not available ure: Data not available. ble. re |
| Section 10 | Stability and reactivity | | | | | | |
| Chemical stabilit Conditions to av | ty: Stable roid: Excessive temperatures to cau | | ous polymerization: \ | Will not occur. | | | |
| | aterials: Strong oxidizers and reducin | | | | | | |
| | mposition products: Carbon oxide | | | | | | |
| Section 11 | Toxicological information | | | | | | |
| Germ cell mutag Carcinogenity: I NTP: No compon IARC: No compor OSHA: No compor Ca Prop 65: This Reproductive to: | kin sensitization: Data not available genicity: Data not available Data not available ent of this product present at levels g nent of this product present at levels product does not contain any chemic xicity: Data not available posure: Data not available | reater than or e greater than or greater than o | equal to 0.1% is identi r equal to 0.1% is iden | fied as probable, pos tified as a carcinogen | sible or confir or potential c | med human card arcinogen by OS | |
| Potential health Inhalation: May b Ingestion: May b Skin: Repeated c Eyes: Contact ma Signs and symp not available. Exc | rd: Data not available | ur knowledge th imize potential | | ind toxicological prop | erties have no | t been thorough | ly investigated. Specific data |
| Potential health Inhalation: May b Ingestion: May b Skin: Repeated c Eyes: Contact ma Signs and sympi not available. Exe Additional inform Section 12 | rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. or prolonged contact with skin may ca ay cause irritation. toms of exposure: To the best of or ercise appropriate procedures to min mation: RTECS #: Data not availab Ecological information | ur knowledge th imize potential | | nd toxicological prop | erties have no | ot been thorough | ily investigated. Specific data |
| Potential health Inhalation: May b Ingestion: May b Skin: Repeated of Eyes: Contact ma Signs and symp not available. Exe Additional inform Section 12 Toxicity to fish: Toxicity to fish: Toxicity to algae Persistence and Mobility in soil: Other adverse ef Section 13 These disposal | rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. or prolonged contact with skin may ca ay cause irritation. toms of exposure: To the best of or ercise appropriate procedures to min mation: RTECS #: Data not availab | ur knowledge th imize potential le :: No data avail Bioaccum PBT and v not be excluded sposal of cata | hazards. able ulative potential: No PvB assessment: No d in the event of unpro | data available o data available fessional handling or nly. Federal regula | disposal. tions may ap | oply to empty c | container. State and/or loca |
| Potential health Inhalation: May b Ingestion: May b Skin: Repeated of Eyes: Contact ma Signs and symp not available. Exe Additional inform Section 12 Toxicity to fish: Toxicity to fish: Toxicity to algae Persistence and Mobility in soil: Other adverse ef Section 13 These disposal | rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. or prolonged contact with skin may ca ay cause irritation. toms of exposure: To the best of or ercise appropriate procedures to min mation: RTECS #: Data not available Ecological information No data available nia and other aquatic invertebrates : No data available degradability: No data available No data available ffects: An environmental hazard can Disposal considerations guidelines are intended for the dis | ur knowledge th imize potential le :: No data avail Bioaccum PBT and v not be excluded sposal of cata | hazards. able ulative potential: No PvB assessment: No d in the event of unpro | data available o data available fessional handling or nly. Federal regula | disposal. tions may ap | oply to empty c | container. State and/or loca |
| Potential health Inhalation: May b Ingestion: May b Skin: Repeated of Eyes: Contact may Signs and symp not available. Exc Additional inform Section 12 Toxicity to fish: Toxicity to dapher Toxicity to algae Persistence and Mobility in soil: Other adverse ef Section 13 These disposal regulations may Section 14 UN/NA number Hazard class: Exceptions: N | rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. or prolonged contact with skin may ca ay cause irritation. toms of exposure: To the best of or ercise appropriate procedures to min mation: RTECS #: Data not available Ecological information No data available nia and other aquatic invertebrates : No data available degradability: No data available No data available degradability: No data available ffects: An environmental hazard can Disposal considerations guidelines are intended for the dia be different. Dispose of in accor Transport information r: Not applicable Not applicable 2020 E | ur knowledge th imize potential le :: No data avail Bioaccum PBT and v not be excluder sposal of cata dance with all ng name: N ng group: N | hazards. able ulative potential: No PvB assessment: No d in the event of unpro log-size quantities o l local, state and fed lot Regulated | data available o data available fessional handling or nly. Federal regula | disposal. tions may ap contract with | oply to empty c a licensed che | container. State and/or loc |
| Potential health Inhalation: May b Skin: Repeated of Eyes: Contact ma Signs and symp not available. Exe Additional inform Section 12 Toxicity to fish: Toxicity to daphy Toxicity to algae Persistence and Mobility in soil: Other adverse ef Section 13 These disposal regulations may Section 14 UN/NA number Hazard class: Exceptions: N Section 15 | rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. or prolonged contact with skin may ca ay cause irritation. toms of exposure: To the best of or ercise appropriate procedures to min mation: RTECS #: Data not available Ecological information No data available nia and other aquatic invertebrates : No data available degradability: No data available No data available degradability: No data available No data available ffects: An environmental hazard can Disposal considerations guidelines are intended for the dir be different. Dispose of in accor Transport information r: Not applicable Not applicable Regulatory information | ur knowledge th imize potential le :: No data avail Bioaccum PBT and v not be excluded sposal of cata dance with all ng name: N ng group: N IRG Guide # | hazards. able ulative potential: No PvB assessment: No d in the event of unpro log-size quantities o l local, state and fed lot Regulated ot applicable Not applicable | data available o data available fessional handling or nly. Federal regula eral regulations or o | disposal. tions may ap contract with | oply to empty c a licensed che | container. State and/or loc emical disposal agency. |
| Potential health Inhalation: May b Ingestion: May b Skin: Repeated of Eyes: Contact may Signs and symp not available. Exe Additional inform Section 12 Toxicity to fish: Toxicity to daphy Toxicity to daphy Toxicity to algae Persistence and Mobility in soil: Other adverse ef Section 13 These disposal regulations may Section 14 UN/NA number Hazard class: Exceptions: N Section 15 A chemical is consid | rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. or prolonged contact with skin may ca ay cause irritation. toms of exposure: To the best of or ercise appropriate procedures to min mation: RTECS #: Data not available Ecological information No data available nia and other aquatic invertebrates : No data available degradability: No data available No data available degradability: No data available No data available ffects: An environmental hazard can Disposal considerations guidelines are intended for the dir be different. Dispose of in accor Transport information r: Not applicable Not applicable Regulatory information lered to be listed if the CAS number for the | ur knowledge th imize potential le :: No data avail Bioaccum PBT and v not be excluded sposal of cata dance with all ng name: N ig group: N iRG Guide # | hazards. able ulative potential: No PvB assessment: No d in the event of unpro log-size quantities o l local, state and fed lot Regulated ot applicable Not applicable is on the Inventory list. | data available o data available fessional handling or nly. Federal regula eral regulations or o Reportable Qu | disposal. tions may ap contract with Jantity: No | oply to empty c a licensed che Ma | container. State and/or loc emical disposal agency. arine pollutant: No |
| Potential health Inhalation: May b Skin: Repeated of Skin: Repeated of Eyes: Contact ma Signs and symp not available. Exe Additional inform Section 12 Toxicity to fish: Toxicity to daphe Toxicity to daphe Persistence and Mobility in soil: Other adverse ef Section 13 These disposal regulations may Section 14 UN/NA number Hazard class: Exceptions: N Section 15 A chemical is consid | rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. or prolonged contact with skin may ca ay cause irritation. toms of exposure: To the best of or ercise appropriate procedures to min mation: RTECS #: Data not available Ecological information No data available nia and other aquatic invertebrates : No data available degradability: No data available No data available degradability: No data available No data available ffects: An environmental hazard can Disposal considerations guidelines are intended for the dir be different. Dispose of in accor Transport information r: Not applicable Not applicable Regulatory information lered to be listed if the CAS number for the | ur knowledge th imize potential le :: No data avail Bioaccum PBT and v not be excluded sposal of cata dance with all ng name: N ng group: N IRG Guide # | hazards. able ulative potential: No PvB assessment: No d in the event of unpro log-size quantities o l local, state and fed lot Regulated ot applicable Not applicable | data available o data available fessional handling or nly. Federal regula eral regulations or o | disposal. tions may ap contract with | oply to empty c a licensed che | container. State and/or loc emical disposal agency. |

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. Form 06/2015

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Section 1

Identification

INNOVATING SCIENCE®

"Cutting edge science for the classroom"

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

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

| Product SIMULATED BLOOD, TYPE B- | |
|---|--|
| Synonyms Simulated Blood, Type B Negative / Suspect #1 | |
| Section 2 Hazards identification | |
| Signal word: WARNING Pictograms: GHS07 Target organs: Blood OffS Classification: Acute toxicity, oral (Category 5) Skin irritation (Category 2) Eye irritation (Category 2B) OHS Label information: Hazard statement(s): H303: May be harmful if swallowed. H315: Causes skin irritation. H320: Causes 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. P361+P364: Take off immediately all contaminated clothing and wash it before reuse. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 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. |

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 Composition / infor | mation on ingredients | | | |
|---|------------------------------------|------------------------|-----------------------------------|--|
| Chemical Name | CAS # | % | EINECS | |
| Water Calcium nitrate, tetrahydrate Food Coloring | 7732-18-5 13477-34-4 Mixture | 89.4% 10.0% 0.6% | 231-791-2 233-332-1 Mixture | |
| 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 Fire fighting measures

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

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.

Form 06/2015

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 prot | ection | | |
|------------------|-----------------------------------|------------------|------------------|------------------|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) |
| Exposure Linits. | 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.

| approved respirator. | | | | | | | |
|---|---|--|--|--|---|---|---|
| Section 9 | Physical and chemical | properties | | | | | |
| Boiling point: Approx Flash point: Data n | , 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 | tte (Water = 1): <1 solid/gas): Data not tts: Lower / Upper: I e (mm Hg): 14 (wate (Air = 1): 0.7 (water) (Specific gravity): App Complete in water. | Data not available r) | Auto-ignitie Decomposi Viscosity: Molecular f | • | e: Data not available Ire: Data not available. ble. re |
| Section 10 | Stability and reactivity | | | | | | |
| Chemical stability: Conditions to avoid | Stable : Excessive temperatures to | | us polymerization: | Will not occur. | | | |
| Incompatible mater | ials: Ammonia, hydrozine a | nd other reducing age | ents. | | | | |
| Hazardous decomp | osition products: Nitrogen | n oxides. | | | | | |
| Section 11 | Toxicological informat | ion | | | | | |
| Serious eye damag Respiratory or skin Germ cell mutageni Carcinogenity: Dat NTP: No component IARC: No componen OSHA: No componen Ca Prop 65: This pro Reproductive toxici STOT-single expossi STOT-repeated exp Aspiration hazard: Potential health effet Inhalation: May be hi Ingestion: May be hi Skin: Contact with sl Eyes: Causes eye ir Signs and symptom not available. Exerci | of this product present at let t of this product present at let nt of this product present at duct does not contain any cl ity: Data not available ure: Data not available Data not available Data not available ects: narmful if inhaled. armful if swallowed. kin may cause irritation. ritation. | ailable vels greater than or e evels greater than or d levels greater than or hemicals known to the t of our knowledge th o minimize potential h | equal to 0.1% is ident equal to 0.1% is iden e State of California to e chemical, physical a | fied as probable, pos tified as a carcinoger o cause cancer or rep | ssible or confirr n or potential c productive toxic | ned human card arcinogen by OS ity. | 0, |
| | | | | | | | |
| Section 12 Toxicity to fish: No | Ecological information | | | | | | |
| Toxicity to daphnia Toxicity to algae: No Persistence and deg Mobility in soil: No Other adverse effec Section 13 These disposal gui | and other aquatic inverteb o data available gradability: No data available data available ts: An environmental hazar Disposal consideration | ble Bioaccumu PBT and vF d cannot be excluded ns he disposal of catal accordance with all | Iditive potential: No PVB assessment: No in the event of unpro og-size quantities o | o data available fessional handling or nly. Federal regula | ations may ap | | ontainer. State and/or local mical disposal agency. |
| UN/NA number: | • | nipping name: N | at Regulated | | | | |
| Hazard class: No Exceptions: Not | t applicable Pa | acking group: No 020 ERG Guide # | ot applicable | Reportable Q | uantity: No | Ма | rrine pollutant: No |
| Section 15 | Regulatory information | n | | | | | |
| | d to be listed if the CAS number | • | • | | 50. | NP C' | 04 F |
| Compone Calcium nitrate (solid | | Listed | CERLCA (RQ) Not listed | RCRA code Not listed | DSL Listed | NDSL Not listed | CA Prop 65 This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. |
| Section 16 | Other information | | | | | | |
| The information contain | ed herein is furnished without w | | | | | | ered by them and must make indepense. NTP: National Toxicology Program |

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| Product SIMULATED BLOOD, TYPE A+ | |
|--|--|
| Synonyms Simulated Blood, Type A Positive / Suspect #2 | |
| Section 2 Hazards identification | |
| Signal word: WARNING Pictograms: GHS07 Target organs: Blood Offs Classification: Acute toxicity, oral (Category 5) 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. | 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 15 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. |

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 | Composition / information | on on ingredients | | |
|---|---------------------------|-----------------------------------|-----------------------|--|
| Chemical Name | | CAS # | % | EINECS |
| Water Aluminum nitrate, Food Coloring | nonahydrate | 7732-18-5 7784-27-2 Mixture | 90.1% 9.3% 0.6% | 231-791-2 236-751-8 (anhydrous CAS # 13473-90-0) Mixture |
| Section 4 | First aid measures | | | |

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 Fire fighting measures

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

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

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

| Section 8 | Exposure controls / personal prot | ection | | |
|------------------|-----------------------------------|------------------|------------------|------------------|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) |
| Exposure Linits. | 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.

| Section 9 | Physical and cher | nical properties | | | | | | |
|--|---|--|--|--|---|--|---|--|
| Appearance: Red Odor: No odor. Odor threshold: [pH: Data not avail: Melting / Freezing poin | d liquid. Data not available. lable. int: Approximately 0°C (32°F) roximately 100°C (212°F) (| (water) Relative densit | rate (Water = 1): <1 (solid/gas): Data not nits: Lower / Upper: I ure (mm Hg): 14 (wate y (Air = 1): 0.7 (water) y (Specific gravity): App): Complete in water. | Data not available r) | Auto-ignitio Decomposi Viscosity: Molecular f | • | e: Data not availab ire: Data not availa ble. re | |
| Section 10 | Stability and react | ivity | | | | | | |
| Chemical stability Conditions to avo | r: Stable id: Excessive temperatu | | lous polymerization: N | Will not occur. | | | | |
| ncompatible mate | erials: Reducing agents | , organic materials. | | | | | | |
| Hazardous decom | position products: Nite | rogen oxides. | | | | | | |
| Section 11 | Toxicological info | rmation | | | | | | |
| IARC: No compone OSHA: No compon Ca Prop 65: This p Reproductive toxi STOT-single expo | ata not available nt of this product present ent of this product presen nent of this product prese roduct does not contain a icity: Data not available isure: Data not available | at at levels greater than on nt at levels greater than o any chemicals known to t | r equal to 0.1% is identi or equal to 0.1% is iden | fied as probable, pos tified as a carcinoge | ssible or confirr n or potential ca | ned human card arcinogen by OS | · · | |
| Aspiration hazard Potential health ei Inhalation: May be Ingestion: May be Skin: Contact with Eyes: Causes seri Signs and sympto | <pre>xposure: Data not availa d: Data not available offects: e harmful if inhaled. harmful if swallowed. skin may cause irritation</pre> | uble e best of our knowledge t | | ind toxicological prop | perties have no | t been thorough | ly investigated. Sp | ecific dat |
| Aspiration hazard Potential health en Ingestion: May be Skin: Contact with Eyes: Causes seri Signs and sympto not available. Exer Additional information | <pre>kposure: Data not availa ffects: harmful if inhaled. harmful if swallowed. ous eye irritation. oms of exposure: To the rcise appropriate procedu ation: RTECS #: Alum</pre> | ble best of our knowledge t ures to minimize potential inum nitrate: BD105000 | I hazards. | and toxicological prop | perties have no | t been thorough | ly investigated. Sp | ecific dat |
| Aspiration hazard Potential health ef Inhalation: May be Ingestion: May be Skin: Contact with Eyes: Causes seri Signs and sympto not available. Exer Additional informa Section 12 | cposure: Data not available iffects: a harmful if inhaled. harmful if swallowed. skin may cause irritation ious eye irritation. oms of exposure: To the rcise appropriate procedu tation: RTECS #: Alumi Ecological information | ble best of our knowledge t ures to minimize potential inum nitrate: BD105000 | I hazards. | Ind toxicological prop | perties have no | t been thorough | ly investigated. Sp | ecific dat |
| Aspiration hazard Potential health ef Inhalation: May be Ingestion: May be Skin: Contact with Eyes: Causes seri- Signs and sympto- not available. Exer Additional informa- section 12 Foxicity to fish: N Foxicity to fish: N Foxicity to daphni Foxicity to daphni Foxicity to algae: P Persistence and d Mobility in soil: N Dther adverse effe Section 13 Fhese disposal g | Apposure: Data not available Second State State Second State State State Second State State State Second Sta | ble ble best of our knowledge t ures to minimize potential inum nitrate: BD105000 ation ertebrates: No data ava vailable Bioaccurr PBT and vanazard cannot be excluded rations for the disposal of cata | I hazards. 10 ilable vPvB assessment: No ed in the event of unpro alog-size quantities o | data available o data available fessional handling or nly. Federal regula | disposal. ations may ap | ply to empty c | ontainer. State a | nd/or loc |
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Section 1

Identification

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

| Product SIMULATED BLOOD, TYPE A+ | |
|---|--|
| Synonyms Simulated Blood, Type A Positive / Crime Scel | ne |
| Section 2 Hazards identification | |
| Signal word: WARNING Pictograms: GHS07 Target organs: Blood GHS Classification: Acute toxicity, oral (Category 5) 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. | 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 15 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. |

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 | Composition / information | n on ingredients | | |
|---|---------------------------|-----------------------------------|-----------------------|--|
| Chemical Name | | CAS # | % | EINECS |
| Water Aluminum nitrate, Food Coloring | nonahydrate | 7732-18-5 7784-27-2 Mixture | 90.1% 9.3% 0.6% | 231-791-2 236-751-8 (anhydrous CAS # 13473-90-0) Mixture |
| 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 Fire fighting measures

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

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 prot | ection | | |
|------------------|-----------------------------------|------------------|------------------|------------------|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) |
| Exposure Linits. | 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.

| Section 9 | Physical and cher | nical properties | | | | | | |
|--|---|---|--|--|---|--|---|--|
| Appearance: Red Odor: No odor. Odor threshold: [pH: Data not avail: Melting / Freezing poin | d liquid. Data not available. lable. int: Approximately 0°C (32°F) roximately 100°C (212°F) (| (water) (water | rate (Water = 1): <1 (solid/gas): Data not nits: Lower / Upper: I ure (mm Hg): 14 (wate y (Air = 1): 0.7 (water) y (Specific gravity): App): Complete in water. | Data not available r) | Auto-ignitio Decomposi Viscosity: Molecular f | • | e: Data not availab ire: Data not availa ble. re | |
| Section 10 | Stability and react | ivity | | | | | | |
| Chemical stability Conditions to avo | r: Stable rid: Excessive temperature | | lous polymerization: N | Will not occur. | | | | |
| ncompatible mate | erials: Reducing agents | , organic materials. | | | | | | |
| Hazardous decom | position products: Nite | rogen oxides. | | | | | | |
| Section 11 | Toxicological info | rmation | | | | | | |
| IARC: No compone OSHA: No compon Ca Prop 65: This p Reproductive toxi STOT-single expo | ata not available nt of this product present ent of this product presen nent of this product prese roduct does not contain a icity: Data not available isure: Data not available | at at levels greater than on nt at levels greater than o any chemicals known to t | r equal to 0.1% is identi or equal to 0.1% is iden | fied as probable, pos tified as a carcinoge | ssible or confirr n or potential ca | ned human carc arcinogen by OS | · · | |
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Section 1

Identification

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| Precautionary statement: P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention. |
|--|
| |

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 | Composition / information on ingredients | | | | |
|--|--|-----------------------------------|---------------------------|-------------------------------------|--|
| Chemical Name | | CAS # | % | EINECS | |
| Water Sodium salicylate FD&C Blue #1 (C.I. | No. 42090) | 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 Fire fighting measures

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

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 Linits. | 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.

| approved respirato | Dhusiaal and shar | ningl manageting | | | | | |
|--|--|---|---|---|--|------------------------------------|---|
| Section 9 Appearance: Liqu | id Clear blue | | rate (Water = 1): <1 | | Partition | oefficient: Data | a not available |
| Odor: No odor. Odor threshold: I pH: Data not avail | Data not available. | Flammability Explosion lin Vapor pressu | r (solid/gas): Data not nits: Lower / Upper: ure (mm Hg): 14 (wate y (Air = 1): 0.7 (water | Data not available er) | Auto-ignit Decompos Viscosity: | ion temperature | e: Data not available u re: Data not available. ble. |
| | proximately 100°C (212°F) (| nately 100°C (212°F) (water) Relative density (Specific gravity): Approximately 1.0 (water) Molecular weight: Mixture available Solubility(ies): Complete in water. | | | | | |
| Section 10 | Stability and react | Stability and reactivity | | | | | |
| Chemical stability Conditions to avo | /: Stable id: Excessive temperatu | | lous polymerization: ation. Protect from ligh | | | | |
| ncompatible mat | erials: Strong oxidizers, | strong acids. | | | | | |
| lazardous decom | nposition products: Ca | rbon oxides, sodium oxid | les. | | | | |
| Section 11 | Toxicological info | rmation | | | | | |
| ARC: No compone OSHA: No compor Ca Prop 65: This p Reproductive tox | ent of this product present ent of this product presen nent of this product prese product does not contain a | it at levels greater than o nt at levels greater than any chemicals known to t | r equal to 0.1% is iden or equal to 0.1% is ide | tified as probable, po ntified as a carcinoge | ssible or confi n or potential o | med human care carcinogen by OS | 0, |
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GENERAL STORAGE CODE GREEN

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Section 1

Identification

INNOVATING SCIENCE® by Aldon 221 Roc Avon, W

"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 and industrial 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 Pictograms Target orga GHS Class GHS Label | ance or mixture has not been classified as hazardous according bally 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. |

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 Composition / information 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 meas | ures | | | |

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 Fire fighting measures

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

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 and chemical | properties | |
|---|---|---|
| Appearance: Liquid. Clear yellow. Odor: No odor. Odor threshold: Data not available. pH: Data not available Melting / Freezing point: Approximately 0°C (32°F) (water) Boiling point: Approximately 100°C (212°F) (water) Flash point: Data not available | 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 and reactivity | | |

Chemical stability: Stable

Form 06/2015

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 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 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: May be harmful if inhaled. Ingestion: May be harmful if swallowed. Skin: May cause mild irritation. Eyes: May cause mild 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. Additional information: RTECS #: No data available 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 PBT and vPvB assessment: No data available Mobility in soil: 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 UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No 2020 ERG Guide # Not applicable Exceptions: Not applicable Section 15 **Regulatory information** A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. CERLCA (RQ) DSL NDSL Component TSCA RCRA code CA Prop 65 This product does not contain Sodium sulfate Listed Not listed Not listed Listed Not listed any chemicals known to the State of California to cause cancer or reproductive toxicity. 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-

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 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.

GENERAL STORAGE CODE GREEN

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Section 1

Identification

"Cutting edge science for the classroom"

By Aldon 221 Rochester Street Avon, NY 14414-9409 (585) 226-6177 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

| Product SIMULATED AN | TI-SERUM ANTI-RH | |
|--|-------------------------|---|
| Synonyms Simulated Anti-RI | h Serum / Anti-Rh Serum | |
| Section 2 Hazard | s identification | |
| Signal word: WARNING Pictograms: No symbol require Target organs: Liver GHS Classification: Eye irritation (Category 2B) | ed | Precautionary statement: P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention. |
| GHS Label information: Hazar H320: Causes eye irritation. | rd statement: | |

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known Section 3 Composition / information on ingredients

| Section 5 | Composition / mormation on ingredients | | | | | | |
|----------------------------|--|----------------------|-----------------|------------------------|--|--|--|
| Chemical Name | | CAS # | % | EINECS | | | |
| Water Sodium salicylate | | 7732-18-5 54-21-7 | 92.00% 8.00% | 231-791-2 200-198-0 | | | |
| 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 Fire fighting measures

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

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. Protect from light.

| Section 8 | Exposure controls / personal protection | | | | | | |
|------------------|---|-----------------|-----------------|-----------------|--|--|--|
| Exposure Limite: | 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.

| Section 9 | | | | | | | |
|---|--|---|--|---|---|---|--|
| 2000010 | Physical and chemic | al properties | | | | | |
| | o Data not available. able. nt: Approximately 0°C (32°F) (wa oximately 100°C (212°F) (wai | ter) Relative density Relative density | ate (Water = 1): <1 (solid/gas): Data noi its: Lower / Upper: re (mm Hg): 14 (water (Air = 1): 0.7 (water (Specific gravity): App : Complete in water. | Data not available er)) | Auto-igniti Decompos Viscosity: Molecular | | : Data not available Ire: Data not available. ble. re |
| Section 10 | Stability and reactivi | ty | | | | | |
| | : Stable d: Excessive temperatures rials: Strong oxidizers, str | s which cause evapora | tion. Light sensitive. | Will not occur. | | | |
| Hazardous decom | position products: Carbo | n oxides, sodium oxide | 9S. | | | | |
| Section 11 | Toxicological inform | ation | | | | | |
| Germ cell mutage Carcinogenity: Da NTP: No componer IARC: No compone OSHA: No compon Ca Prop 65: This pr Reproductive toxi STOT-single expo- STOT-repeated ex Aspiration hazard Potential health ef Inhalation: May be Ingestion: Harmful | nt of this product present at nt of this product present a ent of this product present a roduct does not contain any city: Data not available sure: Data not available posure: Data not available : Data not available fects: harmful if inhaled. May ca | levels greater than or e t levels greater than or at levels greater than o t chemicals known to th e | equal to 0.1% is iden r equal to 0.1% is ide e State of California f | tified as probable, po ntified as a carcinoge | ssible or confir n or potential o | med human card carcinogen by OS | 0, |
| Eyes: Causes serie Signs and sympto not available. Exer | - | est of our knowledge th s to minimize potential | ne chemical, physical hazards. | and toxicological pro | perties have no | ot been thorough | ly investigated. Specific data |
| Eyes: Causes serie Signs and sympto not available. Exer Additional informa Section 12 | bus eye irritation. ms of exposure: To the b cise appropriate procedure ation: RTECS #: VO50756 Ecological information | est of our knowledge th s to minimize potential 000 [Sodium salicylate] on | ne chemical, physical hazards. I | | perties have no | ot been thorough | ly investigated. Specific data |
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Page E1 of E2

Section 1

Identification

"Cutting edge science for the classroom" by Aldon "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 and industrial use only. Not for drug, food or household use.

| Product 0.5% PHENOLPHTHALEIN IN ISOPROPYL ALCOHOL SOLUTION | |
|--|--|
| Synonyms 0.5% Phenolphthalein in IPA / Blood Detection Reagent #1 | |
| Section 2 Hazards identification | |
| Signal word: DANGER Pictograms: GHS02 / GHS07 / GHS08 Target organs: Central nervous system, Liver, Kidneys. Image: Contral nervous system, Liver, Kidneys. GHS Classification: Flammable liquid (Category 3) Eye irritation (Category 2) STOT-SE (Category 2) Mutagenicity (Category 2) Carcinogen (Category 1B) Reproductive toxicity (Category 2) GHS Label information: Hazard statement(s): H226: Flammable liquid and vapour. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness. H341: Suspected of causing genetic defects. H350: May cause cancer. H361: Suspected of damaging fertility. | Precautionary statement(s): P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233: Keep container tightly closed. P241: Use explosion-proof electrical/ventilating/lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing mist/vapours/spray. P264: Wash hands thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312: Call a POISON CENTER or doctor if you feel unwell. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P370+P378: In case of fire: Use dry chemical, dry sand, alcohol foam, carbon dioxide to extinguish. P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations. |
| <u>Hazards not otherwise classified:</u> Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known | 1 |
| Section 2 Composition / information on ingradiants | |

| Section 3 | Composition / information on ingredients | | | | | | |
|---|--|---------------------------------|------------------------|-------------------------------------|--|--|--|
| Chemical Name | | CAS # | % | EINECS | | | |
| Water Isopropyl alcohol Phenolphthalein | | 7732-18-5 67-63-0 77-09-8 | 55.7% 43.8% 0.5% | 231-791-2 200-661-7 201-004-7 | | | |
| 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. CAUSES RESPIRATORY TRACT IRRITATION. 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: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

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: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

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, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

| Section 8 | Exposure controls / personal protection | | | | | | |
|------------------|---|------------------------------|--------------------------------------|------------------------------|--|--|--|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | | | |
| Exposure Linits. | Isopropanol | TWA: 200 ppm / STEL: 400 ppm | TWA: 400 ppm / 980 mg/m ³ | TWA: 400 ppm / STEL: 500 ppm | | | |

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 and chemical pr | operties | | | | | |
|--|---|---|--|---|---|---|---|
| Odor: Aromatic od Odor threshold: pH: Data not avai Melting / Freezing p Boiling point: App | Data not available. | Flammability (Explosion limi Vapor pressur Vapor density Relative density | tte (Butyl acetate = 1): solid/gas): Data not a ts: Lower / Upper: 2 e (mm Hg): 33 mm @ (Air = 1): 2.1 [Pure IP, (Specific gravity): 0.8* a Complete in water. | available. % / 12% [Pure IPA] 20°C [Pure IPA] | Auto-ignitio Decompos Viscosity: Molecular | n temperature: 39 | re |
| Section 10 | Stability and reactivity | | | | | | |
| Chemical stability | y: Stable oid: Excessive temperatures, hea | | ous polymerization: V | | | | |
| | terials: Strong oxidizing materials | | | 0 | compounds o | an react vidorous | sly with this alcohol |
| • | mposition products: Oxides of ca | | | , oloum, onlonnatou | | | |
| Section 11 | Toxicological information | | | | | | |
| IARC classified: G OSHA: No compo CA Prop 65: A W Reproductive tox STOT-single expo | anticipated to be a human carcino Group 2B: Possibly carcinogenic to onent of this product present at leve (ARNING! :This product can exposi kicity: Data not available osure: The substance or mixture exposure: Data not available | humans. [Phenol els greater than o e you to Phenolpl | lphthalein] r equal to 0.1% is ident hthalein, which is know | n to the State of Čal | ifornia to caus | se cancer. | |
| Potential health of Inhalation: Inhala and irritation of the Ingestion: Aspirat develop if this occ Skin: Prolonged of Eyes: Contact ca Signs and sympt | effects: tion of high vapor concentrations r e throat. Continued inhalation may tion hazard. Liquid can directly ent | r résult in uncons er the lungs (asp ation and drying, swelling, and/or b health effects abo | ciousness and death. irated) when swallowed cracking and defatting lurred vision. ove. | d or vomited. Seriou of the skin which ca | s lung damag | e and possible fa | |
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| Potential health of Inhalation: Inhala and irritation of the Ingestion: Aspirat develop if this occ Skin: Prolonged of Eyes: Contact ca Signs and sympt Additional inform Section 12 Toxicity to fish: If Toxicity to daphen Toxicity to daphen Toxicity to daphen Toxicity to dapae: Persistence and of Mobility in soil: If Other adverse eff Section 13 These disposal of regulations may Section 14 UN/NA number Hazard class: Exceptions: L Section 15 A chemical is conside Compo | effects: tion of high vapor concentrations r e throat. Continued inhalation may tion hazard. Liquid can directly enf curs. or repeated contact may cause irrit uses burning sensation, redness, s toms of exposure: See Potential nation: RTECS #: NT8050000 [Is Ecological information Pimephales promelas (Fish, fresh nia and other aquatic invertebrat c Scenedesmus quadricauda (Alga degradability: No data available No data available fects: An environmental hazard ca Disposal considerations guidelines are intended for the be different. Dispose of in acc Transport information : UN1987 Shipping 3 Packing g imited quantity equal to or less Regulatory information ered to be listed if the CAS number for | v résult in unconse er the lungs (asp ation and drying, swelling, and/or b health effects abs sopropanol] / SM8 water) LC50: 964 es: Daphnia mag e), LOEC50 = 1,8 Bioaccum PBT and via annot be excluded disposal of cata ordance with all name: Alcoho proup: III s than 5 L the anhydrous form TSCA Listed | ciousness and death. irated) when swallowed cracking and defatting lurred vision. ove. 3380000 [Phenolphthal 0 mg/l/96 hours [Isopro na (Crustacia), EC50 = 300 mg/l/7 days [Isopro ulative potential: No of ny Bassessment: No d in the event of unprof log-size quantities of local, state and fede ols, n.o.s., (Isopropa Reportat 2020 ER is on the Inventory list. CERLCA (RQ) Not listed | d or vomited. Seriou of the skin which ca lein] = >10,000 mg/l/24 hd panol] data available fessional handling or nly. Federal regula eral regulations or nol) ble Quantity: No G Guide # 127 RCRA code Not listed | s lung damag n lead to derr ours [Isopropa disposal. ations may a contract with DSL Listed | pe and possible fa natitis. nol] pply to empty c n a licensed che Ma NDSL Not listed | container. State and/or loca emical disposal agency. arine pollutant: No CA Prop 65 ▲ WARNING -Cancer - |

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 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.

CORROSIVE STORAGE CODE WHITE

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Section 1

Identification

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CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

| Product | SODIUM HYDROXIDE, 0.1% SOLUTION | |
|--|--|--|
| Synonyms | Sodium Hydroxide, Water Solution | |
| Section 2 | Hazards identification | |
| Pictograms Target orga GHS Class Skin irritatio Eye irritatio GHS Label H316: Caus | d: WARNING s: None required ans: Respiratory tract, Gastrointestinal tract, Eyes, Skin. ification: n (Category 3) n (Category 2B) information: Hazard statement: ses mild skin irritation. ses eye irritation. | Precautionary statement: P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313: If skin irritation occurs: Get medical advice/attention. P337+P313: If eye irritation persists: Get medical advice/attention. |

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 | Composition / information on ingredients | | | | | | |
|---------------------------|--|------------------------|---------------|------------------------|--|--|--|
| Chemical Name | | CAS # | % | EINECS | | | |
| Water Sodium hydroxide | | 7732-18-5 1310-73-2 | 99.9% 0.1% | 231-791-2 215-185-5 | | | |
| 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: CAUSES MILD IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5

Suitable Extinguishing Media: Dry chemical, water spray, alcohol foam. Can react with carbon dioxide to form sodium carbonate.

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. Contact with metals can generate hydrogen gas.

Section 6 Accidental release measures

Fire fighting 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 Limiter | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | | | |
| Exposure Limits: | Sodium hydroxide | STEL: C 2 mg/m ³ | TWA: 2 mg/m ³ | STEL: C 2 mg/m ³ | | | |

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 and chemical p | roperties | | | | | |
| Appearance: Clear Odor: No odor. Odor threshold: N pH: Data not availa Melting / Freezing Boiling point: ~ 10 Flash point: Not fla | ot applicable. ble. point: ~ 0°C (~ 32°F) [water] 0°C (212°F) [water] | Flammability Explosion lim Vapor pressu Vapor density Relative dens | ate (Water = 1): < 1 (solid/gas): Not applica its: Lower / Upper: N- re (mm Hg): 14 [water] (Air = 1): 0.7 [water] ity (Specific gravity): 1 : Complete in water. | ot applicable | Auto-igniti Decompos Viscosity: Molecular | on temperature: | re: Data not available. le. |
| Section 10 | Stability and reactivity | 1 | | | | | |
| Chemical stability: Conditions to avoi | Stable d: Can react with carbon dioxid | | ous polymerization: V carbonate. | /ill not occur. | | | |
| | rials: Metals, acids, organic co | | | | | | |
| Hazardous decom | position products: Sodium ox | de. Reacts with | metals to form flammab | e and explosive hy | drogen gas. | | |
| Section 11 | Toxicological information | ı | | | | | |
| Carcinogenity: Da NTP: No componer IARC: No componer OSHA: No compone Ca Prop 65: This pr Reproductive toxic STOT-repeated ex Aspiration hazard: Potential health ef Inhalation: No data Ingestion: No data Skin: Causes siritat Eyes: Causes sligf Signs and sympto Specific data is not | It of this product present at level nt of this product present at level ent of this product present at level oduct does not contain any cher city: Data not available sure: Data not available posure: Data not available : Data not available fects: available for this dilution. available for this dilution. | Is greater than o els greater than o nicals known to t contact. f our knowledge t procedures to m | r equal to 0.1% is identif or equal to 0.1% is ident he State of California to he chemical, physical ar inimize potential hazard | ied as probable, po fied as a carcinoge cause cancer or re ause cancer or po re | ssible or confir n or potential o productive toxi | rmed human carc carcinogen by OS icity. | SHA. |
| Section 12 | Ecological information | ooululli iiyulokuu | -1 | | | | |
| Toxicity to daphnia Toxicity to algae: N Persistence and do Mobility in soil: No | egradability: No data available | tes: Immobilization Bioaccum PBT and v | on EC50 - Daphnia - 40. Julative potential: No o VPvB assessment: No | 38 mg/l - 48 h [Sod lata available data available | | 1 | |
| These disposal gur regulations may b | uidelines are intended for the e different. Dispose of in acc | disposal of cata cordance with a | alog-size quantities or Il local, state and fede | nly. Federal regul ral regulations or | ations may a contract with | pply to empty c a licensed che | ontainer. State and/or local mical disposal agency. |
| Section 14 | Transport information | | | | | | |
| UN/NA number: Hazard class: N Exceptions: No | Not applicable Pac | oping name: king group: 0 ERG Guide a | • | Reportable Qu | antity: No | Ma | arine pollutant: No |
| Section 15 | Regulatory information | | | | | | |
| | ed to be listed if the CAS number for | • | | | | | |
| Compor | | TSCA | CERLCA (RQ) | RCRA code | DSL | NDSL | CA Prop 65 |
| Sodium hydroxide (| as solid) | Listed | 1,000 lbs (454 kg) | D002 | Listed | Not listed | This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. |
| 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 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. Form 06/2015

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Section 1

Identification

INNOVATING SCIENCE[®] by Aldon 221 Roc Avon, N

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CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

ETHYL ALCOHOL, 70% DENATURED SOLUTION Product Synonyms Ethanol, 70% Aqueous Solution / Holding Solution / 70% Ethanol Section 2 Hazards identification Signal word: DANGER Precautionary statement: Pictograms: GHS02 / GHS07 P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking Target organs: Eyes, Central nervous system, Liver, Kidneys. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P260: Do not breathe mist/vapours/spray. P264: Wash hands thoroughly after handling **GHS Classification:** P271: Use only outdoors or in a well-ventilated area. Flam. liq. (Category 2) Skin irrit. (Category 2) P280: Wear protective gloves/protective clothing/eye protection/face protection. Eye irrit. (Category 2B) P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. STOT-SE (Category 3) P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing Rinse skin with water/shower GHS Label information: Hazard statement: H225: Highly flammable liquid and vapour. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. H315: Causes skin irritation. P312: Call a POISON CENTER or doctor if you feel unwell. H319: Causes serious eve irritation. P332+P313: If skin irritation occurs: Get medical attention. H336: May cause drowsiness or dizziness. P337+P313: If eye irritation persists: Get medical attention. P362+P364: Take off contaminated clothing and wash it before reuse. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

| Section 3 | Composition / information on | Composition / information on ingredients | | | | | |
|---|------------------------------|--|--|--|--|--|--|
| Chemical Name | | CAS # | % | EINECS | | | |
| Ethyl alcohol Water Isopropyl alcohol Methanol | | 64-17-5 7732-18-5 67-63-0 67-56-1 | 59.5 - 60.06% 30.0% 6.3% 2.8 - 2.9% | 200-578-6 231-791-2 200-661-7 200-659-6 | | | |
| Section 4 | First aid measures | | | | | | |

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. CAUSES RESPIRATORY TRACT IRRITATION. 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 Fire fighting measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

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: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

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, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

| Section 8 | Exposure controls / personal protection | | | | | | |
|------------------|---|--|--|--|--|--|--|
| Exposure Limits: | Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) | | | |
| | Ethanol | STEL: 1000 ppm / 1880 mg/m ³ (A3) | TWA: 1000 ppm / 1900 mg/m ³ | TWA: 1000 ppm / 1900 mg/m ³ | | | |

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. | | | Ū | | | | | |
|---|--|---|--|----------------------------|--|--|---|--|
| Section 9 | Physical and chemical pr | operties | | | | | | |
| Section 9 Physical and chemical prevalues Appearance: Clear, colorless liquid. Odor: Mild characteristic odor. Odor threshold: Data not available. pH: Data not available. pH: Data not available. Melting / Freezing point: -114°C (-173°F)* Boiling point: 74-80°C (165.2-176°F)* Flash point: 21°C (70°F) TCC | | Evaporation rate (Butyl acetate = 1): Ca 2* P Flammability (solid/gas): Data not available. A Explosion limits: Lower / Upper: 3.3% / 19.0% D Vapor pressure (mm Hg): Ca 50 @ 20°C* V Vapor density (Air = 1): Ca 1.5* M | | | Auto-ignitio Decomposi Viscosity: Molecular f | artition coefficient: (n-octanol / water): Low Pow:32* uto-ignition temperature: 383°C (721°F)* lecomposition temperature: Data not available. iscosity: Data not available. lolecular formula: Mixture lolecular weight: Mixture *Ethanol | | |
| Section 10 | Stability and reactivity | | | | | | | |
| Chemical stability: Stab | | | | | | | | |
| Section 11 | Toxicological information | | | | | | | |
| Acute toxicity: Oral-rat LD50: 7060 mg/kg ; Inhalation-rat LC50: 124.7 mg/l/4hours [Ethanol] Skin corrosion/irritation: Skin-rabbit - Slight irritant. Serious eye damage/irritation: Eyes-rabbit - Severe 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 classified: Group 3: Not classifiable as to its carcinogenicity to humans. [Isopropanol] 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: A WARNING! 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: A WARNING! This product an expose you to chemicals including Methanol which isknown to the State of California to cause cancer and birth defects or other reproductive harm. Reproductive toxicity: Data not available STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects. STOT-repreted exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects. STOT-repreted exposure: Data not available Aspiration hazard: Data not available Potential health effects: Inhalation: Ingestion cause dizziness, drowsiness, nausea, vomiting, inability to concentrate and irritation of the throat. Ingestion: Ingestion causes dizziness, drowsiness, decreased reaction, euphoria, nausea, vomiting, staggering gait and coma. Skin: Contact with skin causes irritation defatting on prolonged contact. Eyes: Contact with eyes may cause blindness. Signs and symptoms of exposure: See Potential health effects above. | | | | | | | | |
| Section 12 | Ecological information | | | | | | | |
| Toxicity to fish: Oncorhynchus mykiss (fish, fresh water), LC50 = 11,200 mg/l/24 hours [Ethanol] Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacia), EC50 = 10,800 mg/l/24 hours [Ethanol, 99.8% pure] Toxicity to algae: Chlorella pyrenoidosa (Algae), EC50 = 9,310 mg/l/growth rate [Ethanol, absolute] Persistence and degradability: 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 | | | | | | | |
| | delines are intended for the different. Dispose of in acc | | | | | | | |
| Section 14 | Transport information | | | | | | | |
| UN/NA number: | • | name: Ethanol | | | | | | |
| Hazard class: 3 | | | | | | | | |
| Exceptions: Limited quantity equal to or less than 1 L 2020 ERG Guide # 127 | | | | | | | | |
| Section 15 | Regulatory information | | | | | | | |
| A chemical is considered | d to be listed if the CAS number for | | n the Inventory list. | | | | | |
| Compone | nt | TSCA | CERLCA (RQ) | RCRA code | DSL | NDSL | CA Prop 65 | |
| Ethanol Methanol Isopropanol | | Listed Listed Listed | Not listed 5,000 lbs. Not listed | D001 U154 Not listed | Listed Listed Listed | Not listed Not listed Not listed | ▲ WARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov. | |
| Section 16 | Other information | | | | | | | |
| | | | | | | | red by them and must make indepen- | |

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