Section 1 Identification Page E1 of E2

# INNOVATING SCIENCE® by Aldon 221 Roo. Altern All

"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 ANTACID, EFFERVESCENT
Synonyms None

Section 2 Hazards identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: None required Pictograms: No symbol required Target organs: None known

GHS Classification: None required

GHS Label information: Hazard statement: None required

Precautionary statement: None required

### Supplemental information:

This product is sold for laboratory use only. Do not take internally. Do not breathe dust. 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				
Sodium bicarbonate	144-55-8	Approximately 50%	205-633-8				
Citric acid, anhydrous	77-92-9	30-40%	201-069-1				
Acetylsalicylic acid	50-78-2	Approximately 10%	200-064-1				

# 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. MAY CAUSE 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: 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: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

# 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.

Containment and Cleanup: Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2 Section 7 Handling and storage

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 dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

Conditions for Safe Storage: Store in a cool, dry, 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.	Acetylsalicylic acid	TWA: 5 mg/m <sup>3</sup>	None	TWA: 5 mg/m <sup>3</sup>		

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 dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

### Physical and chemical properties Section 9

Appearance: Solid. White tablets

Odor: No odor.

Odor threshold: Data not available

pH: Data not available

Melting / Freezing point: Data not available Boiling point: Data not available

Flash point: Data not available

Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): Data not available

Evaporation rate ( = 1): Data not available

Solubility(ies): Soluble 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 Hazardous polymerization: Will not occur.

Conditions to avoid: Avoid contact with moisture. Incompatible materials: Strong oxidizers.

Hazardous decomposition products: Carbon oxides.

### Section 11 **Toxicological information**

Acute toxicity: Oral-rat LD50: 1124-1228 mg/kg [Acetylsalicylic acid]

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: \Lambda WARNING! : This product can expose you to Acetylsalicylic acid, which is known to the State of California to cause birth defects or other reproductive harm.

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 crushed and inhaled. Ingestion: May be harmful if swallowed. Skin: Contact with skin may cause irritation. Eves: Contact with eves may cause irritation.

Signs and symptoms of exposure: See Potential health effects above. Additional information: RTECS #: VO0700000 [Acetylsalicylic acid]

#### 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

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.

# 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 **Exceptions:** Not applicable

2020 ERG Guide # Not applicable

Reportable Quantity: No Marine pollutant: No

### Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Sodium bicarbonate	Listed	Not listed	Not listed	Listed	Not listed	MARNING - Reproductive Harm - www.P65Warnings.ca.gov.

### 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

Revision Date: July 20, 2022 Supercedes: September 16, 2020 Form 06/2015

SDS No.: DD1005A SAFETY DATA SHEET FLAMMABLE OXIDIZER STORAGE CODE YELLOW

INNOVATING SCIENCE

Identification

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221 Rochester Street

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

Page E1 of E2

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

**ENDOTHERMIC MIXTURE** Product

Synonyms Ammonium Nitrate / Vermiculite Mixture

Section 2 Hazards identification

Signal word: WARNING Pictograms: GHS03 / GHS07 Target organs: Liver, Kidneys, Blood



Section 1



### **GHS Classification:**

Oxidizing solid (Category 3) Acute toxicity, oral (Category 5) Skin irritation (Category 2) Eye irritation (Category 2A)

### GHS Label information: Hazard statement(s):

H272: May intensify fire; oxidizer. H303: May be harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation.

## Precautionary statement(s):

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220: Keep away from clothing/incompatible/combustible materials

P221: Take any precaution to avoid mixing with combustibles/acids/oxidizers.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P312: Call a POISON CENTER or doctor if you feel unwell. P302+P352: IF ON SKIN: Wash with plenty of water and soap.

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 attention. P337+P313: If eye irritation persists: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P370+P378: In case of fire: Use water to extinguish.

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 ingredients						
Chemical Name	CAS#	%	EINECS			
Ammonium nitrate Vermiculite	6484-52-2 1318-00-9	89.3% 10.7%	229-347-8 None assigned			

### 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. MAY CAUSE 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: 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 water. Do not use dry chemicals or foams. CO<sub>2</sub> or Halon<sup>®</sup> may provide limited control. 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. Strong oxidizer. If heated under confinement, material may explode. Ammonium nitrate of any grade, including fertilizer, when contaminated with oil, charcoal or other organic materials should be considered an explosive capable of dentonation by combustion or by explosion of adjacent explosive materials. Combustion by-products include oxides of nitrogen and ammonia. Closed containers may rupture violently when heated.

### 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.

Containment and Cleanup: Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2 Section 7 Handling and storage

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 dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before

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 Limits:	Particulates not otherwise classified/regulated	None established.	TWA: 5 mg/m <sup>3</sup> Respirable fraction	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 dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

#### Section 9 Physical and chemical properties

Appearance: Hygroscopic solid. White granules

Odor: No odor.

Odor threshold: Data not available. pH: 5.4

Melting / Freezing point: 169°C (338°F) **Boiling point:** Decomposes

Flash point: Data not available

Evaporation rate ( = 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available

Solubility(ies): 118 g/100 g water @ 30°C

Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): 1.73 @ 23°C

Partition coefficient: Data not available Auto-ignition temperature: Data not available **Decomposition temperature:** 210°C (410°F) Viscosity: Data not available.

Molecular formula: Mixture Molecular weight: Mixture

#### Section 10 Stability and reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Excessive temperatures and other sources of ignition. Combustible and organic materials.

Incompatible materials: Peroxides, strong oxidizers, reducing agents, organic materials.

Hazardous decomposition products: Nitrogen oxides.

### Section 11 **Toxicological information**

Acute toxicity: Oral-rat LD50: 2217 mg/kg; Inhalation-rat LC50: >88.8 mg/L/4 hours [Ammonium nitrate]

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: Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

Ingestion: May cause gastroenteritis and abdominal pains. Purging and diuresis can be expected. Rare cases of nitrates being converted to the more toxic nitrites have been reported, mostly with infants.

Skin: Causes irritation to skin. Symptoms include redness, itching, and pain.

Eyes: Causes irritation, redness, and pain.

Signs and symptoms of exposure: Small repeated oral doses of nitrates may cause weakness, depression, headache, and mental impairment. Persons with stomach diseases and infants are much more sensitive to nitrate ion toxicity.

Additional information: RTECS #: BR9050000 [Ammonium nitrate]

### Section 12 **Ecological information**

Toxicity to fish: Cyprinus carpio (Fish, fresh water) LC50: 74 mg/L/48 hours

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea) EC50: 555 mg/L

Toxicity to algae: Scenedesmus quadricauda (Algae) EC50: 83 mg/L

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.

# 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: UN1942 Shipping name: Ammonium nitrate

Hazard class: 5.1 Packing group: III Reportable Quantity: No Marine pollutant: No 2020 ERG Guide # 140

**Exceptions:** Limited quantity equal to or less than 5 Kg

### Section 15 Regulatory information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Ammonium nitrate	Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or

### 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

Revision Date: September 26, 2022 Supercedes: September 28, 2020 Form 06/2015