

**Section 1. Identification of Product and Company****Supplier**

ADA
8051 E. Maplewood, Suite 210
Greenwood Village, CO 80111-4742
Telephone Number: 888-843-8416

Supplier Emergency Contacts & Phone Number

CHEMTREC: 800-424-9300

Manufacturer Emergency Contacts & Phone Number

CHEMTREC: 800-424-9300

Product Name: RESPond® Additive

Distributed By

ADA
8051 E. Maplewood, Suite 210
Greenwood Village, CO 80111-4742
Telephone Number: 888-843-8416

CAS Number: N/A

Product/Material Uses

Flue Gas Conditioning Agent

Section 2. Hazard(s) Identification**GHS Classification****WARNING:****OSHA/HCS Status**

This product is considered hazardous by OSHA Hazard Communication Standard (29 CFR 1910.1200); irritant

Oxidizing liquid (Category 3)

Acute liquid (Category 4)

Skin irritation (Category 3)

Eye irritation (Category 2B)

Hazard and Precautionary Statements

H320: Causes eye irritation.
H316: Causes mild skin irritation.
H335: May cause respiratory irritation.
H320: Harmful if swallowed.
H272: May intensify fire; oxidizer.

P220: Keep/Store away from clothing/combustible materials.
P221: Take any precautions to avoid mixing with combustibles.
P264: Wash skin thoroughly after handling.
P280: Wear protective gloves/clothing/eye wear.
P301 + P312: IF SWALLOWED; Call a POISON Center/Doctor if you feel unwell.
P305 + P351 + P338: IF IN EYES; Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.



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P332 + P313: If skin irritation persists: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container to an approved waste disposal site.

Primary Routes of Entry**Inhalation**

May cause respiratory irritation to mucous membranes and lung tissue. Not expected to present an inhalation hazard.

Skin Hazards

May cause skin irritation especially on repeated or prolonged contact.

Eye Hazards

Liquid, aerosols, vapors of the product may be irritating.

Ingestion Hazards

May be harmful if swallowed. Humans are more prone to nitrate and nitrite poisoning. This

Carcinogenicity

See Section 11 for additional information.

Section 3. Composition/Information on Ingredients

Ingredient Name	CAS Number	Percent of Total Weight
*Trade Secret	Not given	100%

Section 4. First Aid Measures

Eye Contact	Immediately flush eyes with plenty of water for at least 20 minutes while holding eyelids open. Get medical attention, if irritation persists.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops or persists.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Get immediate medical attention.
Ingestion	Do not induce vomiting or give anything by mouth to an unconscious person. Seek prompt medical attention
Protection of First Aid Personnel	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. If it is suspected that dust, vapor, mist, or gas is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.



Section 5. Fire-Fighting Measures

Fire and Explosion Hazards

Nonflammable or combustible.

Flash Point: > 200 °F (93 °C)

Auto Ignition Temperature: N/A

Extinguishing Media

Suitable	Use water spray only.
Not Suitable	Do not use carbon dioxide, dry chemical, or alcohol foam.
Special Fire-fighting Procedures & Hazards	Containers can build up pressures if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus – pressure demand (MSA/NIOSH approved or equivalent) and full protective gear.
Unusual Fire & Explosion Hazards	Dried product contains strong oxidizers.

Section 6. Accidental Release Measures

Personal Precautions

Use personal protective equipment recommended in Section 8. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Never exceed any occupational exposure limit.

Environmental Precautions

Use personal protective equipment recommended in Section 8. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Never exceed any occupational exposure limit.

Section 7. Handling and Storage

Handling Precautions

Avoid contact with skin and eyes. Avoid inhalation of vapors or mist.

Storage Precautions

Keep containers away from heat. Keep containers closed when not in use. Store in cool, dry, well-ventilated place away from incompatible (combustible and organic) materials.

Work/Hygienic Practices

Wash thoroughly with soap and water after handling.

**Section 8. Exposure Controls/Personal Protection**

<u>Ingredient Name</u>	<u>ACHIG TLV</u>	<u>OSHA PEL</u>
*Trade Secret	Not established for any chemical present	Not established for any chemical present
Engineering Measures	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure. Maintain adequate ventilation. Do not use in closed or confined spaces.	
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.	
Respiratory	A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstance where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release as exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. Inhalation hazards are not expected.	
Eyes and Face	Wear safety glasses with side shields (or goggles) and a face shield.	
Skin	Where skin contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety goggles plus a face shield.	

Section 9. Physical and Chemical Properties

Appearance	Clear, pale liquid
Odor	Odorless
pH	5.5 to 6.5
Water Solubility	Complete
Vapor Density (air = 1)	Not determined
Evaporation rate (butyl acetate = 1)	Slower than butyl acetate
Boiling Point (°F)	212 – 240 °F (100 – 115 °C)
Freezing Point (°F)	< 5 °F (-15 °C)
Specific Gravity (H ₂ O = 1 @ 70 °F)	1.2 to 1.3
Vapor Pressure	Less than water
Volatile Organic (VOC) Content	Not applicable

Section 10. Stability and Reactivity



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Stable: X Unstable: Hazardous Polymerization: Occurs: Does Not Occur X

Conditions to Avoid High temperatures

Materials to Avoid Keep away from combustible materials

Decomposition Products Oxides of nitrogen, ammonia, carbon dioxide, carbon monoxide (all of which are hazardous if inhaled)

Section 11. Toxicological Information**Eye**

Liquid, aerosols, and vapors of this product may be irritating.

Dermal

May cause skin irritation. Not expected to be absorbed into skin.

Inhalation

May be irritating to mucous membranes and lung tissue. Not expected to present an inhalation hazard.

Oral

Harmful if swallowed. Humans are more prone to nitrate and nitrite poisoning.

Potential Chronic Health Effects**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

Tumorigenic (rat – oral): equivocal tumorigenic agent by RTECS criteria. Liver: tumors. Testicles: tumors.**Mutagenicity**

Germ cell – human – HeLa cell – unscheduled DNA synthesis

Teratogenicity

No data available

Fertility Effects

Reproductive toxicity – mouse – male – oral – paternal effects: spermatogenesis (including genetic material, sperm morphology, motility, and count) (sodium nitrate)

Over-exposure Signs/Symptoms**Inhalation**

No information available.

Ingestion

Effects of overexposure may include dizziness, cramps, and/or rapid heartbeat.

Skin

Allergic reactions are possible.

Eyes

Effects of overexposure may include pain, tearing, reddening, and swelling accompanied by a stinging sensation and/or a feeling like that of a fine dust in the eyes.

Section 12. Ecological Information



Biodegradability No date available

Ecotoxicity No data available

Section 13. Disposal Considerations

Waste Disposal Dispose of in a permitted waste management facility following all local, state, and federal regulations.

RCRA This material is not listed as a hazardous waste if and when it is discarded. Note: If this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.

Section 14. Transport Information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

Table with 3 columns: US DOT 49 CFR 172.101, Non-bulk Shipments (Drums/Totes), Bulk Shipments (Tank Trucks/Rail Cars). Rows include Proper Shipping Name, Hazard Class, Identification Number, Packing Group, Reportable Quantities, and Placards/Labels.

Section 15. Regulatory Information

CERCLA/SARA Emergency A spill or release of this material may trigger the emergency release reporting requirements under CERCLA (40 CFR Part 300) and/or SARA Title III (40 CFR Part 355). State or local reporting requirements may differ from federal requirements. Consult counsel for further guidance on your responsibilities under these laws.

SARA Title III Section 313 None of the compounds in the formulation is on the "List of Lists" requiring reporting. However, it contains inorganic nitrate compounds (not silver nitrate) in aqueous medium. Total nitrate (as NO3 ions) = 40% +/- 2%. Check your local reporting requirements, if any.

Clean Water Act (CWA) Section 311 The following chemicals are listed under Section 311 as hazardous substances requiring the submission of a National Pollutant Discharge Elimination System (NPDES) permit application to EPA.

**No components listed**

TSCA – Toxic Substances Control Act

RCRA – Resource Conservation and Recovery Act

All components of this product are listed on the Toxic Substances Control Act Inventory or are excluded from listing requirements.

The requirements of the federal hazardous waste regulations do not apply unless the waste fails to pass any of EPA's four tests for determining hazardous wastes. Note: If this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.

State Regulations

California

No Components listed

Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer and/or reproductive harm.**Section 16. Other Information**

Occupational Safety & Health Administration (OSHA) CFR 1910.1200 Appendix E - Definition of Trade Secret, establishes criteria to be used in evaluating trade secrets.

*Trade secret means any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.

NFPA Rating

Health: 1

Fire: 0

Reactivity: 0

Hazard:

HMIS Rating

Health: 2

Fire: 0

Reactivity: 0

Personal Protection: B



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SAFETY DATA SHEET

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Disclaimer

This information relates to the product designated herein and does not relate to its use in combination with any other material or in any other process. To the best of ADA Carbon Solutions (Red River), LLC's and ADA-ES, Inc.'s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability, and completeness are not guaranteed. Users are responsible to verify this data for their own particular use and they assume all risks of their reliance upon information contained herein. ADA Carbon Solutions (Red River), LLC and ADA-ES, Inc., shall under no circumstances be liable for incidental or consequential damages as a result of reliance upon information contained herein.

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