



Safety Data Sheet ESTABLISH-R

SECTION 1: Identification

1.1 GHS Product identifier

Product name ESTABLISH-R

1.2 Recommended use of the chemical and restrictions on use

Agricultural Adjuvant

1.3 Supplier's details

Name CAROLINA EASTERN, INC.
Address 347 McAllister Mill Road
Scranton SC 29591
USA

Telephone 843-389-2761

1.4 Emergency phone number

CHEMTREC Administrative Office Telephone number: 1-800-262-8200

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Eye damage/irritation (C.4.5), Cat. 2A
- Skin corrosion/irritation (C.4.4), Cat. 2

2.2 GHS label elements, including precautionary statements.

Pictograms



1. Exclamation mark

Signal word

Warning

Hazard statement(s)

Causes serious eye irritation.
Causes skin irritation.

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Precautionary statement(s)

P264

P280

P305+P351+P338

P337+P313

P302+P352

P321

P332+P313

P362+P364

Wash thoroughly after handling.

Wear eye protection/face protection/protective gloves.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

1. Potassium hydroxide

Concentration

1 - 5 % (weight)

CAS no.

1310-58-3

- Skin corrosion/irritation (C.4.4), Cat. 1A

- Acute toxicity, oral (C.4.1), Cat. 4

H302

Harmful if swallowed.

H314

Causes severe skin burns and eye damage.

Trade secret statement (OSHA 1910.1200(i))

*The specific chemical identities and/or actual concentrations or actual concentration ranges for one or more listed components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Rinse with plenty of water. Get medical attention if irritation develops and persists.

In case of eye contact

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.

Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

If swallowed

Rinse mouth. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a poison center or doctor if you feel unwell.

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4.2 Most important symptoms/effects, acute and delayed.

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2 Specific hazards arising from the chemical.

Non-oxidizing material, not explosive, reacts with strong oxidants and strong acids.

5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Do not allow run-off from firefighting to enter drains or water courses. Relevant water authorities should be notified of any large spillage to water course or drain.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if the product enters sewers or public waters.

6.3 Methods and materials for containment and cleaning up.

Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Pump up the product into a suitably labeled spare container. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Avoid ingestion and inhalation. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities.

Protect from sunlight. Store in well-ventilated place. Store in closed containers with closure in upper position. Store at ambient temperatures, 4-30°C. Protect from freezing, keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Potassium hydroxide (CAS: 1310-58-3 EC: 215-181-3)

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PEL-C (Inhalation): 2 mg/m³; USA (ACGIH)
Upper Respiratory Tract irritation, Eye irritation, Skin irritation

PEL-C (Inhalation): 2 mg/m³; USA (NIOSH)

PEL-C (Inhalation): 2 mg/m³; USA (Cal/OSHA)

TWA (Inhalation): 2 Peak limitation mg/m³; Australia (AU/SWA)

8.2 Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Color	Brown
Odor	Not Determined
Odor threshold	Not Determined
Melting point/freezing point	Not Determined
Boiling point or initial boiling point and boiling range	Not Determined
Flammability	Not Determined
Lower and upper explosion limit/flammability limit	
Flash point	Not Determined
Auto-ignition temperature	Not Determined
Decomposition temperature	Not Determined
pH	8.5
Kinematic viscosity	Not Determined
Solubility	Soluble
Partition coefficient n-octanol/water (log value)	Not Determined
Vapor pressure	Not Determined
Evaporation rate	Not Determined
Density and/or relative density	1.22 g/ml

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Relative vapor density

Not Determined

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts with strong oxidants and strong acids.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal use conditions.

10.4 Conditions to avoid.

Direct sunlight. Gel.

10.5 Incompatible materials

Strong acids. Oxidation agents.

10.6 Hazardous decomposition products

Sulphur dioxide. Nitrogen oxides

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Potassium hydroxide

LD50 Oral - Rat - 333 mg/kg

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

No data available

Specific target organ toxicity (STOT) - single exposure

No data available

Specific target organ toxicity (STOT) - repeated exposure

No data available

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Aspiration hazard

No data available

SECTION 12: Ecological information

Toxicity

No data available on product

Persistence and degradability

No data available on product

Bioaccumulative potential

No data available on product

Mobility in soil

No data available on product.

Other adverse effects

May cause eutrophication at very low concentrations.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Offer surplus and non-recyclable solutions to a licensed disposal company.

Packaging disposal

Dispose of as unused product.

Sewage disposal

Do not allow to enter drains or water courses.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health, and environmental regulations specific for the product in question

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard, Pressure, Reactive

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HMIS Rating

Health	1
Flammability	0
Physical hazard	0
Personal protection	

NFPA Rating

Health hazard	1
Fire hazard	0
Reactivity hazard	0
Special hazard	

SECTION 16: Other information

Certification Date: May 21, 2024

16.1 Further information/disclaimer

DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

16.2 Preparation information

Prepared by IMS Labs, - Crop Excellence Regulatory Consultant