

## Accede Plant Growth Regulator Liquid Concentrate

SDS# VBC-0218 Revision 5

ISSUED 08/24/21

[Classification according to OSHA; 29 CFR § 1910.1200, (3/12/2012)]

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY****1.1 Product Identifier****MATERIAL NAME:** Accede**Synonyms:** VBC-30445**EPA Reg No.:** 73049-517**Code Number:** N/A**List Number:** N/A**Chemical Family:** Plant growth regulator**Substance Registration Number(s)[REACH]:** N/A**1.2 Relevant Identified Uses and Uses Advised Against****Identified Uses:** Pesticide**Uses Advised Against:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling.**1.3 Details of the supplier of the Safety Data Sheet****Supplied By:** Valent BioSciences LLC

1910 Innovation Way, Suite 100

Libertyville, Illinois 60048

**1.4 EMERGENCY TELEPHONE NUMBERS****Emergency Health or Spill:**

Outside the United States: 651-632-6184

Within the United States: 877-315-9819

**2. HAZARDS IDENTIFICATION****2.1 Classification of the Substance or Mixture**

Hazardous to the aquatic environment, Acute Category 1 (Algae)

**2.2 Labeling Elements****Symbol(s)**

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**Signal Word**

WARNING

**Hazard Statement(s)**

Hazardous to the aquatic environment (Algae), Acute Category 2

**2.3 Precautionary Statement:**

**Prevention**

- Wash hands and face thoroughly after handling
- Wear protective gloves
- Wear eye/face protection
- Avoid breathing dust/fume/vapors/spray
- Use only outdoors or in a well-ventilated area

**Response**

- IF ON SKIN: Wash with plenty of water.
- If skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing and wash before reuse.
- 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 INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a poison center/doctor if you feel unwell.

**Storage**

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal**

Dispose of contents/container in accordance with local/regional/national regulations.

**2.4 Other Hazards**

None identified.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #	Component Name	Percent w/w	Percent w/v
22059-21-8	1-aminocyclopropanecarboxylic acid	10	11.2%
Trade Secret	Other ingredients	90	To 100%

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**4. FIRST AID MEASURES****4.1 Description of First Aid Measures****GENERAL:** In all cases of doubt, seek medical attention.**EYES:** Remove from source of exposure. Flush with copious amounts of water. Remove contact lenses, if present and easy to do, after the first 5 minutes, then continue rinsing. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic /supportive care as necessary.**SKIN:** Remove from source of exposure. Take off contaminated clothing. Flush with copious amounts of water. If irritation occurs or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.**INGESTION:** Remove from source of exposure. Move person to fresh air. Do NOT induce vomiting. If signs of toxicity occur, seek medical attention. Provide symptomatic /supportive care as necessary.**INHALATION:** Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary. If person is not breathing, call 911, then give artificial respiration.**4.2 Most important Symptoms and Effects, both Acute and Delayed****Acute**

Skin irritation, eye irritation and may cause respiratory irritation

**Delayed**

No information on significant adverse effects

**4.3 Indication of any Immediate Medical Attention and Special Treatment Needed**

Treat symptomatically and supportively

**5. FIRE FIGHTING PROCEDURES****5.1 Extinguisher Media****Suitable Extinguisher Media**

Dry chemical, water spray, foam or carbon dioxide. Use appropriate medium for the underlying cause of the fire.

**Unsuitable Extinguisher Media**

None known

**5.2 Specific Hazards Arising from the Chemical****Thermal decomposition products**

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Carbon oxides, nitrogen oxides, calcium oxides, hydrogen chloride gas

**5.3 Advice to Firefighters****Protective Equipment and precautions for firefighters**

Fire fighter should wear full-face, self-contained breathing apparatus and protective clothing. Fire fighters should avoid inhaling combustion products. See Section 8 (Exposure Controls / Personal Protection)

**Fire & Explosive hazard**

Not expected to be flammable.

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Use in a well-ventilated area. Avoid breathing vapors, mist, dust or gas. Wear eye protection appropriate to handling activities. Wear gloves. See personal protection as recommended in Section 8.

**6.2 Environmental Precautions**

Keep out of drains, sewers, ditches and waterways. Avoid runoff to waterways and sewers.

**6.3 Methods and Materials for Containment and Cleaning Up**

Ventilate area. Wear appropriate personal protective equipment. Absorb spill with inert solids such as clay or vermiculite, and place into appropriate container for disposal. Do not flush to sewer.

**6.4 Reference to Other Sections**

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations. See Section 13 for Disposal Considerations.

US Regulations may require reporting spills of hazardous materials: See Section 15: REGULATORY INFORMATION for details on reportable quantities, if any.

**7. HANDLING AND STORAGE****7.1 Precautions for Safe handling**

Avoid contact with skin and eyes. Use in a well-ventilated area. For respiratory protection wear a dust mask. Wash thoroughly after handling. Do not eat, drink, chew gum or smoke while working with product, obey reasonable safety precautions and practice good housekeeping.

**7.2 Conditions for Safe Storage, Including Incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Protect against physical damage.

**Incompatibilities**

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None Known

**7.3 Specific End Use(s)**

Plant growth regulator

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control Parameters**

**Component Exposure Limits**

Not known

**Derived No Effect Levels (DNELs)**

No DNELs available

**Predicted No Effect Concentrations (PNECs)**

No PNECs available

**8.2 Exposure Controls**

**Appropriate Engineering Controls**

Provide general ventilation. Where adequate general ventilation is unavailable use local exhaust ventilation, or other engineering controls.

**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. Wear protective clothing, including boots and gloves. Wear a dust mask. Wash thoroughly with soap and water after handling.

**EYE PROTECTION:**

Wear goggles, safety glasses with side shields or full-face shield when splashing or spraying of materials is likely.

**RESPIRATORY PROTECTION:**

Where respiratory protection is warranted, use dust/mist filtering respirator (MSHA/NIOSH approved number prefix TC-21C or a NIOSH approved respirator with any N, P, R or HE filter). Wash thoroughly with soap and water after handling.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Liquid	<b>Evaporation Rate</b>	Not Determined
<b>Color</b>	Golden amber	<b>Flammability</b>	Not Determined
<b>Odor</b>	Faint and unpleasant, sulfur odor	<b>Upper/Lower Flammability limit</b>	Not Determined
<b>Odor Threshold</b>	Not Determined	<b>Upper/Lower Explosive Limit</b>	Not Determined

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<b>pH</b>	5.6	<b>Vapor Pressure</b>	Not Determined
<b>Melting point</b>	Not Determined	<b>Vapor Density</b>	Not Determined
<b>Freezing Point</b>	Not Determined	<b>Relative Density</b>	Not Determined
<b>Boiling Point</b>	Not Determined	<b>Solubility</b>	Not Determined
<b>Boiling Range</b>	Not Determined	<b>Octanol/Water Partition Coefficient</b>	Not Determined
<b>Flash Point</b>	Not Determined	<b>Auto-ignition temperature</b>	Not Determined
<b>Viscosity</b>	Not Determined	<b>Decomposition Temperature</b>	Not Determined

**10. CHEMICAL STABILITY AND REACTIVITY**

**10.1 Reactivity**

Material does not pose a significant reactivity hazard.

**10.2 Chemical Stability**

Stable under ordinary conditions of use and storage.

**10.3 Possibility of Hazardous Reactions**

No data available

**10.4 Conditions to Avoid**

None known

**10.5 Incompatible Materials**

Strong oxidizing agents

**10.6 Hazardous Decomposition Products**

Carbon oxides and unidentified organic compounds.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on Toxicological Effects**

ACUTE EFFECTS Product Toxicology Studies

ORAL TOXICITY: LD<sub>50</sub> (rat) = >5,000 mg/kg body weight

DERMAL TOXICITY: LD<sub>50</sub> (rat) = >5,000 mg/kg body weight

INHALATION TOXICITY: LD<sub>50</sub> (rat) =>5.11 mg/kg

DERMAL IRRITATION: Slightly irritating to the skin

OCULAR IRRITATION: Minimally irritating to the eye

DERMAL SENSITIZATION: Not considered a dermal sensitizer

MUTAGENICITY INFORMATION: Testing has not shown no mutagenicity.

CARCINOGENICITY INFORMATION: Components of this product are not listed as carcinogenic by

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NTP, IARC or OSHA.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY: This material has not presented developmental or reproductive toxicity

SPECIFIC TARGET ORGAN TOXICITY (single exposure):

ASPIRATION HAZARD: No data available

REPEAT DOSE STUDIES: No data available

**12. ECOLOGICAL INFORMATION****12.1 Ecotoxicity**

Based on TGAI

Fish: 96-Hour LC50 >117 mg/L

Bird: Dietary LC50 = 5106 ppm

Invertebrates: 48-hour Daphnia EC50 >105 mg/L

**12.2 Persistence and Degradability**

Soil: DT50 < 4 days.

**12.3 Bioaccumulation potential**

No data available

**12.4 Mobility in Soil**

No data available

**12.5 Results of PBT and vPvB assessment**

Assessments not performed

**12.6 Other adverse effects**

None known

**13. DISPOSAL CONSIDERATIONS****13.1 Waste Disposal Methods**

Dispose of product in accordance with federal, state, provincial, and local regulations. Prevent contamination of environment by wastes.

US EPA WASTE NUMBER & DESCRIPTIONS:

There is no applicable EPA waste number. This product, if discarded, is not expected to be a characteristic or listed hazardous waste.

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**14. TRANSPORTATION INFORMATION**

DOT STATUS: Not regulated for domestic ground transport by US DOT  
UN PROPER SHIPPING NAME: N/A  
REMARKS: N/A

IATA/ICAO STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
REMARKS: N/A

IMDG STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
REMARKS: N/A

**15. REGULATORY INFORMATION****15.1 Safety, Health and Environmental Regulations / Specific Legislation**

TSCA STATUS: Exempt  
CERCLA STATUS: Not regulated as hazardous  
SARA STATUS: Acute: No Chronic: No Fire: No CDT: No  
RCRA STATUS: Not regulated as hazardous

State Right-To-Know:

**Pennsylvania Right To Know Components**

1-Amino-1-cyclopropanecarboxylic acid CAS-No. 22059-21-8  
Calcium Chloride CAS-No.: 10043-52-4  
Edetic Acid CAS-No: 60-00-4

**New Jersey Right To Know Components**

1-Amino-1-cyclopropanecarboxylic acid CAS-No. 22059-21-8  
Calcium Chloride CAS-No.: 10043-52-4  
Edetic Acid CAS-No: 60-00-4

Consult applicable national, state provincial or local laws to determine regulations, laws or ordinances which may be applicable.

OSHA HAZARD COMMUNICATION STANDARD: Not defined by the OSHA Hazard Communication Standard, 29 CFR

**15.2 EPA Pesticide Regulations**

EPA Registration Number: 73049-517  
EPA Pesticide Label signal word: CAUTION



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Product must have EPA Approved Pesticide Label attached to or accompanying all containers.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions and limitations for its use.

**KEEP OUT OF REACH OF CHILDREN****CAUTION****PRECAUTIONARY STATEMENTS****HAZARDS TO HUMANS AND DOMESTIC ANIMALS****CAUTION**

Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Store between 45 and 80°F. The product, once opened, should not be stored below 55°F.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. If recycling is not available puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**16. OTHER INFORMATION****NFPA Hazard Ratings**

Health: N/D  
Flammability: N/D  
Instability: N/D

**HMIS Hazard Ratings**

Health: N/D  
Flammability: N/D  
Instability: N/D

0 = Minimal  
1 = Slight  
2 = Moderate

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3 = Serious

4 = Extreme

REASON FOR ISSUE: Add registration number – EPA regulatory indications

APPROVAL DATE: 08/24/21

SUPERSEDES DATE: 09/17/20

LEGEND: N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

(R) = Registered Trademark of Valent BioSciences LLC

(TM) = Registered Trademark of Valent BioSciences LLC

The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, Valent BioSciences LLC and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, neither Valent BioSciences LLC nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. It is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Valent BioSciences LLC to confirm that you have the most current product label and SDS.

This Safety Data Sheet (SDS) may provide more information than the product label but does not replace or modify the product labeling (attached to and accompanying the product container). The product SDS and the product label both provide consistent and important health, safety, and environmental information as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). This requirement covers employers, employees, emergency responders, users and others handling the product. All necessary hazard classification and appropriate precautionary, use, storage, and disposal information is set forth on the labeling and the SDS.