

Material Safety Data Sheet

Gibberellic Acid 10% Tablet

1. PRODUCT IDENTIFICATION

Product Name: Gibberellic Acid 10% Tablet
 Common Name: Gibberellic Acid
 Chemical Family: Gibberellins
 Chemical Formula: $C_{19}H_{22}O_6$
 Chemical Name: (3*S*,3*aR*,4*S*,4*aS*,7*S*,9*aR*,9*bR*,12*S*) -7,12-dihydroxy -3-methyl -6-methylene-2-oxoperhydro-4*a*,7-methano-9*b*,3-propenoazuleno[1,2-*b*]furan-4-carboxylic acid *Alt*: (3*S*,3*aR*,4*S*,4*aS*,6*S*,8*aR*,8*bR*,11*S*) -6,11-dihydroxy-3-methyl-12-methylene-2-oxo-4*a*,6-ethano-3,8*b*-prop-1-enoperhydroindeno[1,2-*b*]furan-4-carboxylic acid
 CAS No.: 77-06-5
 Product Use: Plant growth regulator

2. COMPANY IDENTIFICATION:

Exporter:

CHICO CROP SCIENCE CO., LTD.

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 Shenzhen, China.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>CAS Registry Number</u>	<u>Typical Wt. w/w</u>
Gibberellic Acid	77-06-5	10 %
Inert	-	to Balance

4. HAZARDS IDENTIFICATION

Emergency Overview

White or off-white tablet.

CAUTION!

KEEP OUT OF REACH OF CHILDREN

MAY CAUSE EYE AND SKIN IRRITATION

MAY CAUSE ALLERGIC SKIN REACTION.

5. FIRST AID MEASURES

If swallowed: Make victim drink water (two glasses at most). Do not induce vomiting unless directed by a physician, and seek medical attention immediately.

If in eye: Flush your eyes with water for 15-20 minutes. Consult a doctor.

If on skin: Remove contaminated clothing, rinse skin with plenty of water for 15-20 minutes and seek medical attention.

If Inhaled: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary. And immediately seek help from an emergency center or a doctor.

Notes to Physician:

There is no specific antidote, Treat symptomatically.

6. FIRE FIGHTING MEASURES

Fire and explosive Properties

Auto-Ignition Temperature	Not applicable
Flash Point	Not applicable

Extinguishing Media

Water fog, Carbon Dioxide, Dry Chemical, Foam.

Fire Fighting Instructions

The product is not flammable. But if firing, fire fighters and others who may be exposed to products of combustion should wear full firefighting turn out gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use. Person who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

7. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Stop the leak, if possible. Ventilated the space involved. Absorb, sweep up, place in container for disposal. Shut off or remove all ignition sources. Prevent waterway contamination. Construct a dike to prevent spreading. Protect works with water spray. Collect run-off water and transfer to drums or tanks for later disposal.

8. HANDLING AND STORAGE

Handling

Harmful if swallowed, inhaled, or absorbed through the skin. Causes eye irritation. Do not breathe gas or allow to get in eyes, on skin, or on clothing. Wash hands, arm and face thoroughly with soap and warm water after use and before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse. Do not contaminate feed or food items. Keep out of reach of children.

Storage

Store in a cool dry and air ventilating warehouse and protected from light. Avoid contacting with food, feed stuff and seed.

9. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/Face Protection

Goggles and full-face shield should be used when needed to prevent liquid from face and getting into the eyes.

Skin Protection

Avoid skin contact. Use chemical-resistant gloves, and wear long sleeves and trousers to prevent dermal exposure.

Respiratory Protection

Under normal handling conditions no respiratory protection is needed. However, if needed to prevent respiratory irritation, either a respirator approved for dusts and mists, or one approved for pesticides.

10. PHYSICAL AND CHEMICAL PROPERTIES

Color:	White or off-white
Physical state:	Tablet
Odor:	No obvious odor
Melting point:	223–225 °C (decomp.)
Boiling point:	Not available
pH:	5.0-8.0
Solubility in water:	In water 4.6 mg/ml (room temperature).
Solubility in organic solvents:	Soluble in methanol, ethanol, acetone, and aqueous alkalis; slightly soluble in diethyl ether and ethyl acetate. Insoluble in chloroform. Potassium, sodium, and ammonium salts: Readily soluble in water (potassium salt 50 g/l).
Partition coefficient:	Not available

11. STABILITY AND REACTIVITY

Stability

Dry gibberellic acid is stable at room temperature, but slowly undergoes hydrolysis in aqueous or aqueous-alcoholic solutions, DT_{50} (20 °C) c. 14 d (pH 3–4), 14 d (pH 7). In alkalis, undergoes a rearrangement to less biologically-active compounds. Decomposed by heat.

Hazardous Polymerization

Does not occur.

Incompatibility

No data available.

Hazardous Decomposition Products

Not available.

12. TOXICOLOGICAL INFORMATION

Acute Oral:	Acute oral LD_{50} for rats and mice >15 000 mg/kg.
Acute Dermal:	Acute percutaneous LD_{50} for rats >2000 mg/kg.
Irritation:	Non-irritating to skin and eyes.
Inhalation:	No ill-effect on rats subjected to 400 mg/l for 2 h/d for 21 d.
Long-term Studies:	Studies showed no evidence of carcinogenicity and mutagenicity to rats and rabbits.

13. ECOLOGICAL INFORMATION

Ecotoxicological Information

Effects on Birds:	Acute oral LD_{50} for bobwhite quail >2250 mg/kg. Acute oral LC_{50} >4640 mg/kg.
Effects on Fish:	LC_{50} (96 h) for rainbow trout >210 ppm.
Daphnia:	EC_{50} (48 h) 488 mg/l; NOEL (48 h) 360 ppm.

Chemical Fate Information

No data are available

14. DISPOSAL CONSIDERATIONS

Waste Disposal

For the packaging container, completely remove the residual agent from the material in the barrel. Landfill or incineration can be used if local authorities permit. Do not reuse empty containers. The residue should be disposed of in strict accordance with the label

requirements.

15. TRANSPORT INFORMATION

UN Number: UN 3077

Dangerous Goods Class: 9

Packing Group: III

16. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

17. OTHER INFORMATION

The information contained herein relates only to the specific material identified. We believe that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, express or implied, is made as to the reliability or completeness of the information. Urge persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.

Chico Crop Science Co., Ltd.