



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE

Product name: Gibberellic acid 90% TC

Chemical name of active ingredient: (3S, 3aS, 4S, 4aS, 7S, 9aR, 9bR, 12S)-7,12-dihydroxy-3--methyl-6-methylene-2-oxoperhydro-4a,7-methano-9b,3-propeno[1,2-b]furan-4-carboxylic acid

Alt: (3S, 3aR, 4S, 4aS, 6S, 8aR, 8bR, 11S)-6,11-dihydroxy-3--methyl-12-methylene-2-oxo=-4a,6-ethano-3,8b-prop-1-enoperhydroindeno[1,2-b]furan-4-carboxylic acid (IUPAC)

Chemical Family: Carboxylic acid

Product Use: Plant growth regulator

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/preparation:

Ingredients	CAS No.	Percent %
Gibberellic acid	77-06-5	90%
Impurities		10%

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects: Very hazardous in case of eye contact (irritant), of ingestion, of inhalation. Inflammation of the eye is characterized by redness, watering, and itching.

Potential Chronic Health Effects:

Very hazardous in case of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (irritant).

Carcinogenic effects: Not available.

Mutagenic effects: Not available.

Teratogenic effects: Not available.

Developmental Toxicity: Not available.

4. FIRST-AID MEASURES

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention. **Ingestion:** Do not induce vomiting. Loose tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Skin contact: No know effect on skin contact, rinse with water for a few minutes.

Eye contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.



5. FIRE FIRGHTING MEASURES

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash point: Not available.

Flammable Limits: Not available.

Products of Combustion: There products are carbon oxides (CO, CO₂).

Fire Fighting Media and Instructions: Small fire: Use dry chemical powder. Large fire: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

6. ACCIDENTAL RELEASE MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment if ingested, seek medical advice immediately and show the container or the label.

Storage: Keep containers dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If use operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Splash goggles. Lab Coat.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient, consult a specialist BEFORE handling this product.

Exposure Limits: Not available.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: solid

Odor: Not available.

Solubility in water: Not available.

PH: Not available.

10. STABILITY AND REACTIVITY

Chemical Stability: This product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various Substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Polymerization: No.

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Eye contact. Inhalation. Ingestion.

Acute toxicity Oral: LD50 (rat) 6300mg/kg.

Acute toxicity Dermal: LD50 (rabbit) 2001mg/kg

Chronic Effects on Humans: Not available.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Products of Biodegradation: Possible hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

13. DISPOSAL CONSIDERATIONS

Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable Local, Provincial and Federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.

14. TRANSPORT INFORMATION

TDG Classification: Not regulated.

DOT Classification: Not a DOT controlled material.



15. REGULATORY INFORMATION

None.

16. OTHER INFORMATION

None.