

## Material Safety Data Sheet

GIBBERELLIC ACID 40% SP (SOLUBLE POWDER)

### 1. COMPOSITION/INFORMATION ON INGREDIENTS

**Common name**

gibberellic acid (BSI, draft E-ISO, accepted in lieu of a common name); acide gibbérellique (draft F-ISO)

**IUPAC name**

(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

**Chemical Abstracts name**

(1 $\alpha$ ,2 $\beta$ ,4a $\alpha$ ,4b $\beta$ ,10 $\beta$ )-2,4a,7-trihydroxy-1-methyl-8-methylenegibb-3-ene-1,10-dicarboxylic acid 1,4a-lactone

**CAS No.:** 77-06-5

**Ingredients**

**Gibberellic acid:** 400 g/kg (40.0% w/w) Min

**Other ingredients:** 60.0% w/w Max

### 2. 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.

### 3. FIRST AID MEASURES

**Eye Contact:** Check for and remove any contact lenses. Do not use an eye ointment.

Seek medical attention.

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

**Serious Skin Contact:** Not available.

**Inhalation:** Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**

Do not induce vomiting. Loosen 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.

**Serious Ingestion:** Not available.

#### 4. FIRE FIGHTING MEASURES

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

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not available.

**Flammable Limits:** Not flammable.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>).

**Fire Hazards in Presence of Various Substances:** Not available.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

**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.

#### 5. 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.

#### 6. 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 container 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.

## 7. 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 user 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.

## 8. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state and appearance:** Solid.

**Odor:** odorless.

**Color:** White.

**Molecular Weight:** 346.38 g/mole

**pH (1% soln/water):**5.0~7.5

**Specific Gravity:** 1.16 g/cm<sup>3</sup>

**Solubility:** Completely soluble in water.

## 9. STABILITY AND REACTIVITY

**Stability:** The 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.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.



**Polymerization:** No.

## 10. TOXICOLOGICAL INFORMATION

**Routes of Entry:** Eye contact. Inhalation. Ingestion.

**Toxicity to Animals:**

Acute oral toxicity (LD50): 6300 mg/kg [Rat].

Acute dermal toxicity (LD50): 2001 mg/kg [Rabbit].

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:** Very hazardous in case of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**Special Remarks on other Toxic Effects on Humans:** Not available.

## 11. ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly 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.

**Special Remarks on the Products of Biodegradation:** Not available.

## 12. DISPOSAL CONSIDERATIONS

**Waste Disposal:**

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## 13. TRANSPORTATION INFORMATION

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## 14. REGULATION INFORMATION

**Federal and State Regulations:** TSCA 8(b) inventory: Gibberellic acid

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications:****WHMIS (Canada):** CLASS D-2B: Material causing other toxic effects (TOXIC).**DSCL (EEC):** R41- Risk of serious damage to eyes.**HMIS (U.S.A.):****Health Hazard:** 2**Fire Hazard:** 1**Reactivity:** 0**Personal Protection:** j**National Fire Protection Association (U.S.A.):****Health:** 2**Flammability:** 1**Reactivity:** 0**Specific hazard:****Protective Equipment:**

Not applicable.

Lab coat.

Wear appropriate respirator when ventilation is inadequate.

Splash goggles.

**15. OTHER INFORMATION**

WHMIS Classification: This product is registered under the Pest Control Products Act and is exempt from the requirements of WHMIS.

**16. ADDITIONAL INFORMATION**

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.

