

CH Biotech R&D Co., Ltd.

Safety Data Sheet

SDS # CHB-063

Section 1 Identification

Produced by: CH Biotech LLC.
601 Kettering Drive, Ontario, CA 91761, USA
Telephone: +1-909-472-3033
Chemtrec: +1-800-424-9300
Product name: **Gibberellic Acid (GA₃) 4% SL**
Product use: Plant hormone

Section 2 Hazard(s) identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225

Eye irritation (Category 2A), H319

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P337 + P313	If eye irritation persists: Get medical advice/ attention.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS

May form explosive peroxides.

Section 3 Composition/information on ingredients

Identity	CAS #	Typical %
GA ₃	77-06-5	4
Isopropyl alcohol	67-63-0	90
Other ingredients		6

Section 4 First aid measures

General advice

Move out of dangerous area. 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. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 Fire-fighting measures

Extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture:	Carbon oxides
Advice for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Further information:	Use water spray to cool unopened containers.

Section 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Reference to other sections

For disposal see section 13.

Section 7 Handling and storage

Precautions for safe handling:

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Specific end use(s):

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

Section 8 Exposure controls/personal protection

Control parameters

Components with workplace control parameters:

Component	CAS#	Value	Control Parameters	Basis
Isopropyl alcohol	67-63-0	TWA	200.00ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices Not classifiable as a human carcinogen		
		TWA	200ppm	USA. ACGIH Threshold Limit Values (TLV)
		Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices Not classifiable as a human carcinogen		
		STEL	400ppm	USA. ACGIH Threshold Limit Values (TLV)
		Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices Not classifiable as a human carcinogen		
		STEL	400.00ppm	USA. ACGIH Threshold Limit Values (TLV)
		Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation		

		Substances for which there is a Biological Exposure Index or Indices		
		Not classifiable as a human carcinogen		
		TWA	400.00ppm 980.00mg/m ³	USA. Occupational Exposure Limits (OSHA)-Table Z-1 Limits for Air Contaminants
		The value in mg/m ³ is approximate.		
		TWA	400.00ppm 980.00mg/m ³	USA.NIOSH Recommended Exposure Limits
		ST	500.00ppm 1,225.00mg/m ³	USA.NIOSH Recommended Exposure Limits

Biological occupational exposure limits:

Component	CAS#	Value	Control Parameters	Biological specimen	Basis
Isopropyl alcohol	67-63-0	Acetone	40.00mg/L	Urine	ACGIH-Biological Exposure Indices (BEI)
	Remarks	End of shift at end of workweek			

Exposure controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 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

Impervious clothing, flame retardant antistatic protective clothing. 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 respirator with multipurpose combination (US) or type ABEK (EN 14387) 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).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 9 Physical and chemical properties

Appearance: Colorless liquid

Solubility: Soluble in water
Boiling point: N/D
pH: 1.8 (22°C)
Density: 0.8 g/cm³
Flashpoint: 16 °C (Tag Closed Cup)
Vapor pressure: N/D

Section 10 Stability and reactivity

Reactivity: N/A
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: Vapors may form explosive mixture with air.
Conditions to avoid: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials: Oxidizing agents, Acid anhydrides, Aluminum, Halogenated compounds, Acids

Hazardous decomposition products

Other decomposition products: N/A
In the event of fire: see section 5

Section 11 Toxicological information

Acute toxicity: N/A
Dermal toxicity: N/A
Inhalation: N/A
Skin corrosion/irritation: N/A
Serious eye damage/eye irritation: N/A
Respiratory or skin sensitization: N/A

Section 12 Ecological information

Toxicity

Toxicity to fish: N/A
Persistence and degradability: N/A
Bioaccumulative potential: N/A
Mobility in soil: N/A
Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: N/A

Section 13 Disposal considerations

Waste treatment methods

Product:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging:

Dispose of as unused product.

Section 14 Transport information

DOT (US)

UN number: 1219 Class: 3 Packing group: II

Proper shipping name: Isopropanol
Poison Inhalation Hazard: No

IMDG

UN number: 1219 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: Isopropanol

IATA

UN number: 1219 Class: 3 Packing group: II
Proper shipping name: Isopropanol

Legend

N/A = Not Applicable
N/D = Not Determined
NL = Not listed

Section 15 Regulatory information

N/A

Section 16 Other information

Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
STOT SE	Specific target organ toxicity - single exposure

HMIS Rating

Health hazard:	2
Chronic Health Hazard:	*
Flammability:	3
Physical Hazard:	0

NFPA Rating

Health hazard:	2
Fire Hazard:	3
Reactivity Hazard:	0

Preparation Information

Date of preparation: September 9th, 2015
Date of last revision: September 9th, 2015
Legend: N/A = Not Applicable
N/D = Not Determined
NL = Not listed

The information and recommendations contained herein are based on our best knowledge, **CH Biotech R&D Co., Ltd.** does not guarantee their accuracy or completeness. **No warranty of merchantability or any other warranty, express or implied is made.** CH Biotech R&D Co., Ltd. assumes **no** responsibility for results obtained or for incidental or consequential damages arising from the use of these data.