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Material Safety Data Sheet

Gibberellic acid

Section 1: Chemical Product and Company Identification				
1.1 Product identifiers	1.1 Product identifiers			
Product Name: Gibberellic acid				
Molecular formula: C ₁₉ H ₂₂ O ₆				
CAS Nr: 77-06-5	CAS Nr: 77-06-5			
EINECS: 201-001-0				
Molecular weight: 346.37				
1.2 Relevant identified uses of the substance or mixture and uses advised against				
Identified uses : Laboratory chemicals, Manufacture of substances				
1.3 Details of the supplier of the safety data sheet				
Hefei TNJ Chemical Industry Co.,Ltd.				
B911 Xincheng Business Center	Tel : (0086) 551 65418678			
Qianshan Road, Hefei	Fax: (0086) 551 65418697			
230004Anhui	Email: info@tnjchem.com			
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1.4 Contact Information for Emergency: (0086) 551 65418678				

Section 2:	Hazards Identification			
2.1 Classification of the substance or mixture				
Classification according to Regulation (EC) No 1272/2008				
Eye irritation (Category 2), H319				
For the full text of the H-Statements mentioned in this Section, see Section 16.				
Classification according to EU Directives 67/548/EEC or 1999/45/EC				
Xi	Irritant	R36		

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word	Warning
Hazard statement(s)	
H319	Causes serious eye irritation.
Precautionary statement(s)	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none
2.3 Other hazards - none	

Section 3: Composition and Information on Ingredients				
3.1 Substanc	es			
Synonyms :		Gibberellin A3		
		GA3		
Formula :		C ₁₉ H ₂₂ O ₆		
Molecular We	ight :	346,37 g/mol		
CAS-No. :		77-06-5		
EC-No. :		201-001-0		
Hazardous in	igredients accordin	g to Regulation (EC) No 1272/2008		
Component		Classification	Concentration	
(3S,3aS,4S,	4aS,6S,8aR,8bR,11S	6,11-Dihydroxy-3-methyl-12-methy	ene-2-oxo-4a,6-ethano-3,8bprop-1-eno	perhydroi
(3S,3aS,4S, ndeno[1,2-b		6)-6,11-Dihydroxy-3-methyl-12-methy	ene-2-oxo-4a,6-ethano-3,8bprop-1-eno	operhydroi
		6)-6,11-Dihydroxy-3-methyl-12-methyl Eye Irrit. 2; H319	ene-2-oxo-4a,6-ethano-3,8bprop-1-eno	perhydroi
ndeno[1,2-b)furan-4-ca			operhydroi
ndeno[1,2-b CAS-No.)furan-4-ca 77-06-5			operhydroi
ndeno[1,2-b CAS-No. EC-No.	9]furan-4-ca 77-06-5 201-001-0			perhydroi
ndeno[1,2-b CAS-No. EC-No.	9]furan-4-ca 77-06-5 201-001-0	Eye Irrit. 2; H319		perhydroi
ndeno[1,2-b CAS-No. EC-No. Hazardous in Component	o]furan-4-ca 77-06-5 201-001-0 ngredients accordin	Eye Irrit. 2; H319 g to Directive 1999/45/EC Classification	<= 100 %	
ndeno[1,2-b CAS-No. EC-No. Hazardous in Component	9]furan-4-ca 77-06-5 201-001-0 ngredients accordin 4aS,6S,8aR,8bR,115	Eye Irrit. 2; H319 g to Directive 1999/45/EC Classification	<= 100 % Concentration	
ndeno[1,2-b CAS-No. EC-No. Hazardous in Component (3S,3aS,4S,	9]furan-4-ca 77-06-5 201-001-0 ngredients accordin 4aS,6S,8aR,8bR,115	Eye Irrit. 2; H319 g to Directive 1999/45/EC Classification	<= 100 % Concentration	

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

Section 4: First Aid Measures

4.1 Description of first aid measures General advice 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 Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure

adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed

containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Store under inert gas.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

impervious 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

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: solid
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	Melting point/range: 227 °C
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evapouration rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
I) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: noctanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available
9.2 Other safety information	
no data available	

Section 10: Stability and Reactivity Data

10.1 Reactivity

no data available

10.2 Chemical stability		
Stable under recommended storage conditions.		
10.3 Possibility of hazardous reactions		
no data available		
10.4 Conditions to avoid		
no data available		
10.5 Incompatible materials		
Strong oxidizing agents		
10.6 Hazardous decomposition products		
Other decomposition products - no data available		
In the event of fire: see section 5		

Section 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - rat - 6.300 mg/kg LD50 Dermal - rabbit - > 2.000 mg/kg **Skin corrosion/irritation** no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Histidine reversion (Ames)

Human lymphocyte Cytogenetic analysis Mammal lymphocyte DNA damage

Carcinogenicity

Carcinogenicity - mouse - Oral Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Liver:Tumors. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: LY8990000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - > 150 mg/l - 96 h

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

Section 13: Disposal Considerations

13.1 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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

Section 14:	Transport Informa	tion		
14.1 UN number				
ADR/RID: -		IMDG: -	IATA: -	
14.2 UN proper s	hipping name			
ADR/RID:	Not dangerous goods			
IMDG:	Not dangerous goods			
IATA:	Not dangerous goods			
14.3 Transport ha	azard class(es)			
ADR/RID: -		IMDG: -	IATA: -	
14.4 Packaging group				
ADR/RID: -		IMDG: -	IATA: -	
14.5 Environmental hazards				
ADR/RID: no		IMDG Marine pollutant: no	IATA: no	
14.6 Special prec	autions for user			
no data available				

Section 15: Other Regulatory Information

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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Section 16: Other Information

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

Eye Irrit. Eye irritation H319 Causes serious eye irritation. Full text of R-phrases referred to under sections 2 and 3

Xi Irritant R36 Irritating to eyes.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.