

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)
and Commission Regulation (EU) No 453/2010

MAXCEL



1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

MaxCel
6-benzyladenine, 1.9% soluble concentrate (20 g/l)
GIFAP code: SL
EC number: not applicable

1.2. Relevant identified uses of the substance or mixture and uses advised against

Plant growth regulator (agricultural use)
Not for public use

1.3. Details of the supplier of the safety data sheet

INTERFARM (UK) LIMITED
36 Newgate Street
Doddington
Cambridgeshire PE15 0SR
United Kingdom
Tel.: +44 (0)1354 741414
email: technical@interfarm.co.uk

Manufacturer of the product

VALENT BIOSCIENCES CORPORATION
870 Technology Way, Suite 100
Libertyville, Illinois 60048
USA
Tel.: +1 847 9684700

1.4. Emergency Telephone number 24/24hrs

UK & Ireland; +44 (0)333 333 9962

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not classified as hazardous according to regulation (EC) No 1272/2008 (CLP)

Signal word(s) none

Pictogram (s) none

Hazard statement(s) none

2.2. Label elements

Signal word(s) none

Pictogram (s) none

Hazard statement(s) none

Precautionary statement(s)

P261: Avoid breathing spray.
P285: In case of inadequate ventilation wear respiratory protection
P501 (UK): Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty clean containers, which can be disposed of as non-hazardous waste.
EUH 401: To avoid risks to human health and the environment, comply with the instructions for use.
EUH 208: Contains 3,4,5-trihydroxybenzoic acid propyl ester. May produce an allergic reaction.

Special risks and safety precautions (Commission Regulation (EU) 547/2011):

General provisions

SP 1: Do not contaminate water with the product or its container (Do not clean application equipment near surface water).

Specific safety precautions

None

2.3. Other hazards

None known

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)
and Commission Regulation (EU) No 453/2010

MAXCEL



3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. This product is to be considered as a mixture in conformance to EU regulations.

Composition/Information on main ingredients

Number	% w/w	CAS number	Chemical name
1	2.0	1214-39-7	6-benzyladenine
2	>3	9004-98-2	Polyoxyethylene (20) Oleyl Ether
3	≤0.1	121-79-9	3,4,5-Trihydroxybenzoic acid propyl ester
4	>1 - <10	77-92-9	Citric acid, anhydrous

Number	EC number	Annex-1 listing	Regl 1272/2008 Pict.	Hazard statements
1	214-92-7-5	yes	GHS07, GHS08, GHS09	H302, H361D, H400, H411
2	/	NA	GHS05	H318
3	204-498-2	NA	GHS07	H317
4	/	NA	GHS07	H319

Other information code ID: VBC-30127

4. FIRST AID MEASURES

4.1. Description of first aid measures

General	In all cases of doubt, seek medical attention.
Inhalation	Move to fresh air. If symptoms persist, seek medical advice.
Skin	Remove contaminated clothing. Wash skin immediately with water.
Eye	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.
Ingestion	Rinse mouth. Never induce vomiting in unconscious or confused persons. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

No typical symptoms and effects known.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment is advised.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing media	Dry chemical powder, carbon dioxide, foam, sand or water.
Unsuitable extinguishing media	None known.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition during combustion may evolve toxic and irritant vapours.

5.3. Advice for fire-fighters

Wear self-contained breathing apparatus. Wear suitable protective clothing and eye/face protection.

Other information

Water used to extinguish a fire should not be allowed to enter the drainage system or watercourses.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel Wear protective gloves, safety goggles or face shield, and suitable protective clothing. Remove ignition sources. Evacuate the danger area.

For emergency responders Wear protective nitrile gloves, safety goggles or face shield, and suitable protective clothing. Remove ignition sources. Evacuate the danger area or consult an expert.

6.2. Environmental precautions

Do not allow escape into sewage system or watercourses. Do not wash residues into drains or other waterways.

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)
and Commission Regulation (EU) No 453/2010

MAXCEL



6.3. Methods and material for containment and cleaning up

Containment of a spill Do not allow escape into sewage system or watercourses.

Clean-up procedures In case of spill (liquid), soak it up immediately with suitable absorbent, such as sawdust or granular absorbent clay. Sweep up and place into sealable containers. Dig up heavily contaminated soil and place into drums. Use a damp cloth to clean floors and other objects, and also place in sealable container. Dispose of all waste and contaminated clothing in the same manner as waste chemicals (i.e. via an authorized disposal facility). Do not wash residues into drains or other waterways.

6.4. Reference to other sections For personal protection see section 8.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling The usual precautions for handling chemicals should be observed. For personal protection see section 8.

Fire and explosion prevention No specific recommendations.

7.2. Conditions for safe storage, including any incompatibilities

Storage requirements Store in a dry and cool place. Keep container in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Do not drink, eat and smoke in work areas.

Other information Do not mix with water (except for the normal preparation).

7.3. Specific end use(s) See label on the container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters There is no national exposure limit for this product.
No chemical safety report is required for this kind of product.

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation.

Individual protection measures

Respiratory The usual precautions for handling chemicals should be observed.
Hand Wear protective nitrile gloves
Eye Wear safety goggles or face shield.
Skin and body Wear suitable protective clothing.

Other information Launder clothes before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Name	6-benzyladenine, 1.9% soluble concentrate (20 g/l)
Appearance	clear liquid (Visual inspection)
Colour	colourless (Visual inspection)
Odour	no discernible odour (Olfactory inspection)
Odour threshold	not applicable
pH value	3.5 (1% w/v in water, 20°C) (CIPAC MT 75.3)
Melting point/freezing point	not applicable
Initial boiling point & boiling range	not determined
Flash point	103 °C (EEC A9)
Evaporation rate	not applicable
Flammability	not "highly flammable" (based on the components)
Upper/lower flammability or explosive limits	LEL 2.6%, UEL 12.6% (propylene glycol)
Vapour pressure	not determined (6-benzyladenine: 6×10^{-7} Pa, 25°C, OECD 104)
Vapour density	not applicable
Relative Density	1.05 g/ml (20°C) (OECD 109)
Bulk density	not applicable
Solubility in water	soluble in water (solubility of 6-benzyladenine = 65.7 mg/l (20°C, pure water) (OECD 105)
Solubility in other solvents	not applicable

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)
and Commission Regulation (EU) No 453/2010

MAXCEL



Partition coefficient n-octanol/water	not applicable (6-benzyladenine: log Pow = 2.16, 20°C) (OECD 107)
Autoignition temperature	> 400 °C (EEC A15)
Decomposition temperature	the active substance decomposes at temperatures > 245°C
Dynamic Viscosity	120 mm ² /s at 20°C and 26.2 mm ² /s at 40°C (OECD 114)
Kinematic viscosity	115 mm ² /s at 20°C and 25.0 mm ² /s at 40°C (OECD 114)
Explosive properties	not explosive (EEC A14)
Oxidising properties	not oxidising (EEC A21)

9.2. Other information

Relative vapour density (air = 1)	not determined
Surface tension	43.5 mN/m for a 0.375% v/v dilution at 20°C; 43.0 mN/m for a 0.75% v/v dilution at 20°C. (OECD 115)

10. STABILITY AND REACTIVITY

10.1. Reactivity	Stable under recommended storage and handling conditions (see also section 7).
10.2. Chemical stability	Stable under recommended storage and handling conditions (see section 7).
10.3. Possibility of hazardous reactions	None known.
10.4. Conditions to avoid	Avoid high temperatures, light, humidity.
10.5. Incompatible materials	Oxidizers.
10.6. Hazardous decomposition products	Thermal decomposition during combustion may evolve toxic and irritant vapours (see also section 5).

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No experimental toxicological data are available on the preparation as such. The following data are applicable to a very close formulation:

Name	6-benzyladenine, 1.9% soluble concentrate (20 g/l) (code ID: VBC-30001)
Acute toxicity	
Oral	LD ₅₀ rat: >5000 mg/kg (OECD 423)
Dermal	LD ₅₀ rat: >5000 mg/kg (OECD 402)
Inhalation	LC ₅₀ rat (4 hours): >4.99 mg/l (nose-only) (OECD 403)
Irritation	
Skin	weakly irritating (OECD 404)
Eye	weakly irritating (OECD 405)
Sensitization	not sensitizing (maximisation test) (OECD 406)

The following data are applicable to the ingredient(s) listed below:

Name	Active substance, 6-benzyladenine, technical grade
Other toxicological information	- Genotoxicity: negative (US EPA 152B-15, 152B-17, EPA FIFRA 84-2, OECD 473, OECD 476) - Carcinogenicity: no carcinogenic effect. Assumption of "non-harmful" is strongly supported by absence of major effects in regulatory acute and subchronic studies at very high doses in rodents. Short-term and subchronic toxicity studies show a low order of toxicity, which doesn't appear to increase with duration of exposure. Literature search has not raised any issues which could lead one to suspect carcinogenicity. - Multigeneration reproduction study (rat): negative (OECD 416) - Teratogenicity: suspected of damaging the unborn foetus (FIFRA § 152B-13, OECD 414)

Based on the available data, no classification criteria are met for any of these hazard classes.

Information on likely routes of exposure

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)
and Commission Regulation (EU) No 453/2010

MAXCEL



This product is for agricultural use; therefore the most probable routes of exposure are via skin or inhalation.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Name	6-benzyladenine, 1.9% soluble concentrate (20 g/l)
Fish	Acute toxicity, 96h-LC ₅₀ (<i>Oncorhynchus mykiss</i>): 32 mg/l (OECD 203)
Daphnia	Acute toxicity, 48h-EC ₅₀ (<i>Daphnia magna</i>): > 129 mg/l (OECD 202)
Algae	Acute toxicity, 72h (<i>Pseudokirchneriella supcapitata</i>): E _r C ₅₀ > 100 mg/l E _b C ₅₀ = 71.8 mg/l NOEC _{r&b} = 12.5 mg/l (OECD 201)
	Acute toxicity, 72h (<i>Navicula pelliculosa</i>): E _r C ₅₀ = 28.2 mg/l E _b C ₅₀ = 5.69 mg/l NOEC _{r&b} = 1.95 mg/l (OECD 201)
Aquatic plant	Acute toxicity, 7d-EC ₅₀ (<i>Lemna gibba</i>): E _r C ₅₀ > 100 mg/l E _b C ₅₀ = 57.3 mg/l NOEC _{r&b} = 25 mg/l (OECD 221)

The following data are applicable to a very close formulation:

Name	6-benzyladenine, 1.9% soluble concentrate (20 g/l) (code ID: VBC-30001)
Bees	Acute oral toxicity, 48h-LD ₅₀ (<i>Apis mellifera</i>): >400 µg/bee (OECD 213) Acute contact toxicity, 48h-LD ₅₀ (<i>Apis mellifera</i>): >400 µg/bee (OECD 214)

The following data are applicable to the ingredient(s) listed below:

Name	Active substance, 6-benzyladenine, technical grade
Sediment dwelling midge	Chronic toxicity, 28d-NOEC (<i>Chironomus riparius</i>) = 4.52 mg/l (OECD 219)
Aquatic plant	Acute toxicity, 7d-EC ₅₀ frond (<i>Lemna gibba</i>): 0.31 mg/l 7d-NOEC _{frond} = 0.035 mg/l 7d-NOEC _{obs} < 0.010 mg/l (OECD 221)
Birds	Acute toxicity, LD ₅₀ (Bobwhite quail): 1599 mg/kg (U.S. EPA Guideline FIFRA 71-1)
Bees	Acute oral toxicity, 48h-LC ₅₀ (<i>Apis mellifera</i>): > 58.73 µg/bee (OECD 213) Acute contact toxicity, 48h-LC ₅₀ (<i>Apis mellifera</i>): > 100 µg/bee (OECD 214)
Earthworm	Acute toxicity, 14d-LC ₅₀ (<i>Eisenia foetida</i>): > 1000 mg/kg dry soil
Soil micro organisms	No significant impact on carbon mineralization or nitrogen transformation at up to 1 mg a.s./ kg dw soil (OECD 216, OECD 217)

12.2. Persistence and degradability

The following data are applicable to the ingredient(s) listed below:

Name	Active substance, 6-benzyladenine, technical grade
Degradation Biotic	Readily biodegradable. Naturally broken down in the environment (OECD 301D)
Degradation Abiotic	Hydrolytically stable at pH 4, 7, 9 (OECD 111)
Biological methods for sewage treatment	EC ₅₀ activated sludge: > 1,000 mg/l (OECD 209)

12.3. Bioaccumulative potential

The following data are applicable to the ingredient(s) listed below:

Name	Active substance, 6-benzyladenine, technical grade
Bioaccumulation	Partition coefficient n-octanol/water log Pow = 2.16 (OECD 107) Bio Concentration Factor (BCF): no bioaccumulation study is necessary.

12.4. Mobility in soil

The following data are applicable to the ingredient(s) listed below:

Name	Active substance, 6-benzyladenine, technical grade
	Adsorption K _{oc} values: 282 to 1945 ml/g ; Desorption K _{ocdes} values: 460 to 2897 ml/g Therefore the substance showed a low to medium mobility depending on soil type (OECD 106).

12.5. Results of PBT and vPvB assessment

Not required (no chemical safety report required).

12.6. Other adverse effects

No other known adverse effects on the environment.

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)
and Commission Regulation (EU) No 453/2010

MAXCEL



13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Substance and/or Mixture According to local regulations. For further advice contact manufacturer.
Contaminated packaging According to local regulations.

14. TRANSPORT INFORMATION

Land transport ADR/RID, Sea transport IMO/IMDG, Air transport ICAO-TI/IATA-DGR:

14.1. UN Number None

14.2. UN proper shipping name Not relevant

14.3. Transport hazard class(es)

Land transport ADR/RID class:	not restricted	label:	not relevant
IMO/IMDG code class:	not restricted		
Air transport ICAO-TI/IATA-DGR class:	not restricted		

14.4. Packing group Not relevant

14.5. Environmental hazards Marine pollutant: no

14.6. Special precautions for user EMS: not relevant
No other special precaution required.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the ICB Code
Not applicable

15. REGULATORY INFORMATION

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

There is no specific regulation/legislation for this mixture.

15.2. Chemical safety assessment

No chemical safety assessment is required for this mixture.

16. OTHER INFORMATION

Method for evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 used for the purpose of classification:

Classification based on tests, on a close formulation, and properties of the active substance.

Changes made to the previous version: Section 1; change to emergency telephone number. Sections 2, 3, 11, 12, were modified to update the classification of the ingredients, remove any reference to directives 2001/59/EC or 1999/45/EC, add changes due to ATP4, and new data. [Based on 6BA2SL₃₀₁₂₇CLP/EU/230gb from SCAE]

Full text of hazard statement(s) used in this document:

H302: Harmful if swallowed
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage
H361D: Suspected of damaging the unborn child
H400: Very toxic to aquatic life
H411: Toxic to aquatic life with long lasting effects

This information only concerns the above mentioned product for the specific use mentioned and is not valid for such product used in combination with any other product. The information is to our best knowledge correct and complete and is given in good faith as of the date indicated. It is the user's responsibility to use this information as appropriate for his own particular use of this product.