



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 8/30/2019 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Substance name : 8-Bromoadenosine

IUPAC name : (2R,3R,4S,5R)-2-(6-amino-8-bromo-9H-purin-9-yl)-5-(hydroxymethyl)oxolane-3,4-diol

 EC-No.
 : 220-959-0

 CAS-No.
 : 2946-39-6

 Product code
 : 15591729

 Formula
 : C10H12BrN5O4

 Product group
 : Raw material

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

1.2.1. Relevant identified uses

Main use category : Laboratory use, Industrial use, Professional use

Industrial/Professional use spec : For professional use only Use of the substance/mixture : For analytical purposes

Scientific research and development

Not for human consumption or veterinary purposes.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Scafell Organics Molekula Ltd Lingfield Way Darlington - England

T +44 (0) 1949 823777 / +44 (0) 7590 545705

info@molekula.com / kbowen@molekula.com - www.molekula.com

1.4. Emergency telephone number

Emergency number : +44 (0) 7590 545705

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2

Serious eye damage/eye irritation, Category 2

H319

Specific target organ toxicity — Single exposure, Category 3,

H335

Respiratory tract irritation

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07 : Warning

Signal word (CLP) : Warning

Hazard statements (CLP)

: H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

Precautionary statements (CLP)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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SECTION 3: Composition/information on ingredients		
3.1. Substances		
Name	Product identifier	%
	(CAS-No.) 2946-39-6 (EC-No.) 220-959-0	100

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If possible show this sheet, if not available show packaging or label. Never give anything by mouth to an unconscious person. Do not leave affected person unattended.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable

for breathing. Give oxygen or artificial respiration if necessary. If breathing difficulties

persist: Get medical advice/attention.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash

immediately with plenty of water. Do not remove clothing if it sticks to the skin. If irritation

persists, consult a doctor.

First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. Do not induce vomiting. Get medical advice/attention.

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

Symptoms/effects after inhalation : Irritation to throat. Headache. Cough. Burning sensation.

Symptoms/effects after skin contact : Causes skin irritation. Itching. Redness, pain.

Symptoms/effects after eye contact : Causes serious eye irritation. redness, itching, tears. stinging.
Symptoms/effects after ingestion : May cause irritation to the digestive tract. Abdominal pain, nausea.

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

Get immediate medical advice/attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Carbon oxides (CO, CO2). hydrogen bromide. Nitrogen oxides.

5.3. Advice for firefighters

Precautionary measures fire : Keep container tightly closed and away from heat, sparks and flame. Keep away from

combustible materials.

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Warn all persons of toxic hazard.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate from fire, if possible, without unnecessary risk. Avoid dust formation. No flames, no

sparks. Eliminate all sources of ignition.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent

access to unauthorized personnel. Do not touch or walk on the spilled product. Avoid

contact with skin, eyes and clothing.

Measures in case of dust release : Keep upwind. Avoid creating or spreading dust. Ventilate the area thoroughly, especially

low lying areas (basements, workpits etc).

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Use self-contained breathing apparatus and

chemically protective clothing.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Shovel or sweep up and put in a closed container for disposal.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid creating or spreading dust. Provide local exhaust or general room ventilation.

Hygiene measures : Take off immediately all contaminated clothing and wash it before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when

leaving work. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat

sources, Direct sunlight. Keep container closed when not in use.

Incompatible products : Strong oxidizing agents.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Storage temperature : 2 - 8 °C

Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

Storage area : Store in a dry place. Store in a closed container.

7.3. Specific end use(s)

For analytical purposes. Scientific research and development. Not for human consumption or veterinary purposes.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety procedures.

Personal protective equipment:

Avoid all unnecessary exposure.

Materials for protective clothing:

Wear suitable protective clothing, gloves and eye/face protection

Hand protection:

The protective gloves to be used must comply with the specifications of the regulation 2016/425 and the resultant standard EN 374

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.11		EN 374

Eye protection:

Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Use eye protection according to EN 166, designed to protect against powders and dusts.

Туре	Use	Characteristics	Standard
Safety goggles	Fine dust, Dust	tightly fitting safety goggles, With side shields	EN 166

Skin and body protection:

Emergency safety showers should be available in the immediate vicinity of any potential exposure. Keep suitable chemically resistant protective clothing readily available for emergency use

Туре	Standard
Protective clothing (with elasticated cuffs and closed neck)	EN ISO 13982

Respiratory protection:

Keep self contained breathing apparatus readily available for emergency use. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

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Device	Filter type	Condition	Standard
Respiratory protective device with a particle filter	Type P1, Type P2	Dust protection	EN 14387

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Powder.
Molecular mass : 346.14 g/mol

Colour : White to off-white. Cream.

Odour : No data available. Odour threshold No data available рΗ : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : 210 - 212 °C Freezing point No data available Boiling point : No data available Flash point : No data available · No data available Auto-ignition temperature Decomposition temperature : No data available Flammability (solid, gas) : Non flammable. Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density : No data available Solubility : No data available Log Pow : No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available : No data available Explosive properties : No data available Oxidising properties

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive limits

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

No data available

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature. Thermal decomposition generates: Carbon oxides (CO, CO2). hydrogen bromide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Causes skin irritation.

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Causes serious eye irritation.

Additional information : Based on available data, the classification criteria are not met

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Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : May cause respiratory irritation.

Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met Potential adverse human health effects and : Based on available data, the classification criteria are not met.

symptoms

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic foxicity : Not classified Chronic aquatic toxicity : Not classified

12.2. Persistence and degradability

8-Bromoadenosine (2946-39-6)

Persistence and degradability No data available

12.3. Bioaccumulative potential

8-Bromoadenosine (2946-39-6)

Bioaccumulative potential No data available.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

8-Bromoadenosine (2946-39-6)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID	
14.1. UN number					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.2. UN proper shippin	14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.3. Transport hazard class(es)					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.4. Packing group					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	

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14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

8-Bromoadenosine is not on the REACH Candidate List

Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16

December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:		
Eye Irrit. 2 Serious eye damage/eye irritation, Category 2		
Skin Irrit. 2 Skin corrosion/irritation, Category 2		
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.