

Safety Data Sheet

AICAR**EFFECTIVE DATE: 2014-11-21**

1 Product and Company Identification

- 1.1 Product Name:** AICAR
- 1.2 Product Identifier:** 5-amino-1-β-D-ribofuranosyl-1H-imidazole-4-carboxamide
- 1.3 Catalog Number:** 72702, 72704
- 1.4 Synonyms:** Acadesine; AICA Riboside; NSC 105823; 5-amino-1-β-D-ribofuranosyl-1H-imidazole-4-carboxamide
- 1.5 Product Use:** Laboratory Chemical
- 1.6 Manufacturer/Supplier:** STEMCELL Technologies
Suite 500-1618 Station Street
Vancouver, British Columbia V6A 1B6 Canada
- 1.7 In Case of Emergency Call:** 1-800-667-0322

2 Hazards Identification

2.1 Classification of the substance or mixture

Skin Corrosion/Irritation, Category 2

Serious Eye Damage/Eye Irritation, Category 2

Target Organ Systemic Toxicity (single exposure), Category 3

2.2 Label elements

Pictogram

**Signal word** Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement(s)

P264 Wash {hands} thoroughly after handling.

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

P362 Take off contaminated clothing and wash it before reuse.

P261 Avoid breathing {dust/fume/gas/mist/vapours/spray}.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P332+313 If skin irritation occurs, get medical advice/attention.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313 If eye irritation persists, get medical advice/attention.

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P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a {POISON CENTER/doctor/...} if you feel unwell.
2.3 Other hazards	No data available

3 Composition / Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC #
AICAR	2627-69-2	100%	220-097-5

4 First Aid Measures

4.1 Description of first aid measures

4.1.1 If inhaled

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

4.1.2 In case of skin contact

Immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

4.1.3 In case of eye contact

Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes examined and tested by medical personnel.

4.1.4 If swallowed

Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

The toxicological properties of this product have not been fully evaluated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 Fire Fighting Measures

5.1 Extinguishing Media

5.1.1 Suitable Extinguishing Media

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
 Use water spray to cool fire-exposed containers.

5.1.2 Unsuitable Extinguishing Media

A solid water stream may be inefficient.

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No data available

5.2.2 Flash Pt

No data available

5.2.3 Autoignition Pt

No data available

5.2.4 Explosive Limits

LEL: No data available

UEL: No data available

5.2.5 Hazardous Combustion Products

No data available

5.3 Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid raising and breathing dust, and provide adequate ventilation.

As conditions warrant, wear a NIOSH approved (or equivalent) self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental precautions

Take steps to avoid release into the environment, if safe to do so.

6.3 Methods and materials for containment and cleaning up

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

7 Handling and Storage**7.1 Precautions for safe handling**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage

Keep container tightly closed.

Store in accordance with information listed on the product insert.

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8 Exposure Controls/Personal Protection

8.1 Exposure limits

Component	CAS #	Value	Control parameters
AICAR	2627-69-2	No data available	No data available

8.2 Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.3 Personal protective equipment

8.3.1 Eye/face protection

Safety glasses

8.3.2 Skin protection

Compatible chemical-resistant gloves

Lab coat

8.3.3 Respiratory protection

NIOSH (US) or CEN (EU) approved respirator, as conditions warrant.

8.3.4 General hygiene considerations

Do not take internally.

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Wash thoroughly after handling.

8.3.5 Environmental exposure controls

No data available

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	A crystalline solid
Odour	No data available
Odour threshold	No data available
Melting point/freezing point	No data available
Boiling point/boiling range	No data available
Decomposition temperature	No data available
Relative density	No data available
Solubility in water	No data available
Solubility in other liquids	~2.5 mg/mL in PBS (pH 7.2); ~1 mg/mL in EtOH; ~20 mg/mL in DMSO; ~10 mg/mL in DMF
pH	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity	No data available
Vapour pressure	No data available
Vapour density	No data available

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Evaporation rate	No data available
Flash point	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Auto-ignition temperature	No data available

9.2 Other information

Molecular formula	C ₉ H ₁₄ N ₄ O ₅
Molecular weight	258.2

10 Stability and Reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	Stable
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	Carbon dioxide Carbon monoxide

11 Toxicological Information

11.1 Acute toxicity	No data available
11.2 Skin corrosion/irritation	No data available
11.3 Serious eye damage/eye irritation	No data available
11.4 Aspiration hazard	No data available
11.5 Specific target organ toxicity - single exposure	No data available
11.6 Specific target organ toxicity - repeated exposure	No data available
11.7 Respiratory and/or skin sensitization	No data available
11.8 Carcinogenicity	
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.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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11.9 Reproductive toxicity

No data available

11.10 Germ cell mutagenicity

No data available

11.11 Signs and symptoms of exposure

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

11.12 RTECS # No data available

12 Ecological Information
12.1 Toxicity

 Avoid release into the environment.
 Runoff from fire control or dilution water may cause pollution.

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 Other adverse effects

No data available

13 Disposal Considerations
13.1 Waste disposal method

Dispose in accordance with local, provincial/state, and federal regulations.

14 Transport Information
14.1 UN number

No data available

14.2 UN proper shipping name

 DOT Not dangerous goods
 ADR/RID Not dangerous goods
 IMDG Not dangerous goods
 IATA Not dangerous goods

14.3 Transport hazard class(es)

No data available

14.4 Packing group

No data available

14.5 Environmental hazards

No data available

14.6 Special precautions

No data available

15 Regulatory Information
15.1 US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)
AICAR	2627-69-2	No	No	No

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15.2 Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP, ODC	CWA NPDES	TSCA	CA PROP.65
AICAR	2627-69-2	No	No	Yes - Inventory	No

15.3 Regulatory information statement

This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and European Directive 67/548/EEC as amended.

15.4 WHMIS Classification

D2B Toxic Material Causing Other Toxic Effects
 WHMIS compliant label available upon request

16 Other Information

16.1 Prepared by: Quality Control, STEMCELL Technologies Inc.

16.2 Revision: N/A

16.3 Notice: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.

16.4 Disclaimer: **THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.**