

Safety Data Sheet

Rho Kinase Inhibitor IV (Dihydrochloride)
EFFECTIVE DATE: 2016-06-29

1 Product and Company Identification

- | | |
|---------------------------------------|--|
| 1.1 Product Name: | Rho Kinase Inhibitor IV (Dihydrochloride) |
| 1.2 Product Identifier: | methanol 99.5% |
| 1.3 Catalog Number: | 73802, 73804 |
| 1.4 Product Use: | Laboratory Chemical |
| 1.5 Manufacturer/Supplier: | STEMCELL Technologies
Suite 500-1618 Station Street
Vancouver, British Columbia V6A 1B6 Canada |
| 1.6 In Case of Emergency Call: | 1-800-667-0322 |

2 Hazards Identification

2.1 Classification of the substance or mixture

Flammable Liquids, Category 2
 Acute Toxicity - Inhalation, Category 3
 Acute Toxicity - Oral, Category 3
 Acute Toxicity - Dermal, Category 3
 Specific Target Organ Toxicity (Single Exposure), Category 1

2.2 Label elements

Pictogram



Signal word Danger

Hazard statement(s)

H225	Highly flammable liquid and vapour.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H370	Causes damage to organs.

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/light/.../equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash {hands} thoroughly after handling.

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P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+310	IF SWALLOWED Immediately call a POISON CENTER or doctor/physician.
P302+352	IF ON SKIN Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair) Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P307+311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P330	Rinse mouth.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.

2.3 Other hazards No data available

3 Composition / Information on Ingredients

3.1 Substances

Synonyms	(S)-Glycyl-H-1152; 2-amino-1-[(3S)-hexahydro-3-methyl-4-[(4-methyl-5-isoquinoliny)]sulfonyl]-1H-1,4-diazepin-1-yl]-ethanone, dihydrochloride
Molecular formula	C ₁₈ H ₂₄ N ₄ O ₃ S • 2HCl
Molecular weight	449.4

Hazardous Components (Chemical Name)	CAS #	Concentration	EC #
2-amino-1-[(3S)-hexahydro-3-methyl-4-[(4-methyl-5-isoquinoliny)]sulfonyl]-1H-1,4-diazepin-1-yl]-ethanone, dihydrochloride	913844-45-8	0.5%	N/A
methanol	67-56-1	99.5%	200-659-6

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 15 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 15 minutes. Have eyes examined and tested by medical personnel.

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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

Overexposure may cause: confusion, dermatitis, headache, drowsiness, dizziness, gastrointestinal disturbance, optic nerve damage (blindness), nausea, unconsciousness, vomiting, visual disturbance, weakness

May cause convulsions.

Once methanol is absorbed into the body, it is very slowly eliminated.

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

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.

5.2 Special hazards arising from the substance or mixture**5.2.1 Flammable Properties and Hazards**

Can release vapors that form explosive mixtures at temperatures at or above the flashpoint.

Container explosion may occur under fire conditions.

Emits toxic fumes under fire conditions.

Sensitive to static discharge

Vapors can travel to a source of ignition and flash back.

5.2.2 Flash Pt

11°C Method Used: Closed Cup

5.2.3 Autoignition Pt

385°C

5.2.4 Explosive Limits

LEL: 6.0% at 25°C

UEL: 36% at 25°C

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. *Note: Flammable as diluted in methanol.*

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6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, 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.

Keep away from sources of ignition.

Take precautionary measures against static discharge.

7.2 Conditions for safe storage

Keep away from heat, sparks, and flame.

Keep container tightly closed.

Store in accordance with information listed on the product insert.

8 Exposure Controls/Personal Protection

8.1 Exposure limits

Component	CAS #	Value	Control parameters
2-amino-1-[(3S)-hexahydro-3-methyl-4-[(4-methyl-5-isoquinoliny)sulfonyl]-1H-1,4-diazepin-1-yl]-ethanone, dihydrochloride	913844-45-8	No data available	No data available
Methanol	67-56-1	Britain EH40	TWA: 266 mg/m ³ (200 ppm) STEL: 333 mg/m ³ (250 ppm)
		France VL	TWA: 260 mg/m ³ (200 ppm) STEL: 1300 mg/m ³ (1000 ppm)
		Europe	TWA: 260 mg/m ³
		OSHA TWA	PEL: 200 ppm
		ACGIH TWA	TLV: 200 ppm STEL: 250 ppm

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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	Liquid	
Odour	No data available	
Odour threshold	No data available	
pH	No data available	
Melting point/freezing point	No data available	
Boiling point/boiling range	No data available	
Flash point	11°C	Method Used: Closed Cup
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Upper/lower flammability or explosive limits	LEL: 6.0% at 25°C	UEL: 36% at 25°C
Vapour pressure	96 mm HG at 20°C	
Vapour density	No data available	
Relative density	No data available	
Solubility	No data available	
Partition coefficient: n-octanol/water	No data available	
Auto-ignition temperature	385°C	
Decomposition temperature	No data available	
Viscosity	No data available	

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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	Heat, flames and sparks
10.5 Incompatible materials	Acids, alkali metals, reducing agents, strong oxidizing agents
10.6 Hazardous decomposition products	Carbon dioxide, carbon monoxide

11 Toxicological Information**11.1 Acute toxicity**

Oral:	Methanol:	LD50 (rat): 5600 mg/kg, LD50 (rabbit): 14,200 mg/kg, LDLO (human): 143 mg/kg
Inhalation:	Methanol:	LC50 (rat): 64,000 ppm (4 hours), LC50 (mouse): 61,100 ppm (134 minutes)
Dermal:	Methanol:	LD50 (rabbit): 15,800 mg/kg
Other:		No data available

11.2 Skin corrosion/irritation

Skin irritation (rabbit): 20 mg (24 hours) moderate

11.3 Serious eye damage/eye irritation

Methanol: Irritation (rabbit): 40 mg moderate, Irritation (rabbit): 100 mg (24 hours) moderate

11.4 Respiratory and/or skin sensitization

No data available

11.5 Germ cell mutagenicity

No data available

11.6 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.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
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.

11.7 Reproductive toxicity

No data available

11.8 Specific target organ toxicity - single exposure

No data available

11.9 Specific target organ toxicity - repeated exposure

No data available

11.10 Aspiration hazard

No data available

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11.11 Potential health effects

Inhalation: Toxic if inhaled. Material may be irritating to the mucous membranes and upper respiratory tract.
 Ingestion: Toxic if swallowed. May be fatal or cause blindness if swallowed.
 Skin: Toxic if absorbed through skin. May cause skin irritation.
 Eyes: Causes damage to eyes. May cause eye irritation

11.12 Signs and symptoms of exposure

Methanol: Investigated as a mutagen and reproductive effector.
 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

11.13 RTECS # Methanol: PC1400000

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.

13.2 Contaminated packaging
 Dispose of as unused product.

14 Transport Information

14.1 UN number	DOT	1230
	ADR/RID	1230
	IMDG	1230
	IATA	1230
14.2 UN proper shipping name	DOT	Methanol solution
	ADR/RID	Methanol solution
	IMDG	METHANOL
	IATA	Methanol solution
14.3 Transport hazard class(es)	DOT	3 – FLAMMABLE LIQUID, POISON
	ADR/RID	3 – FLAMMABLE LIQUID, POISON
	IMDG	3 – FLAMMABLE LIQUID, TOXIC SUBSTANCE
	IATA	3 – FLAMMABLE LIQUID, POISON
14.4 Packing group	DOT	II
	ADR/RID	II
	IMDG	II
	IATA	II

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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)
2-amino-1-[(3S)-hexahydro-3-methyl-4-[(4-methyl-5-isoquinolino liny)lsulfonyl]-1H-1,4-diazepin-1-yl]-ethanone, dihydrochloride	913844-45-8	No	No	No
Methanol	67-56-1	No	Yes 5000 LB	Yes

15.2 Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP, ODC	CWA NPDES	TSCA	CA PROP.65
2-amino-1-[(3S)-hexahydro-3-methyl-4-[(4-methyl-5-isoquinolino liny)lsulfonyl]-1H-1,4-diazepin-1-yl]-ethanone, dihydrochloride	913844-45-8	No	No	No	No
Methanol	67-56-1	No	No	Yes – Inventory	Yes

15.3 EU

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

15.4 Canada

WHMIS Classification:

B2	Flammable liquid.	Flammable liquid.
D1B	Toxic material causing immediate and serious toxic effects	Toxic by ingestion. Toxic by skin absorbtion. Toxic by inhalation. Specific target organ toxicity – single exposure.

This SDS was prepared in accordance with Hazardous Products Regulations (HPR) and WHMIS 2015.

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.**