

UM171
SAFETY DATA SHEET

ACCORDING TO US CFR 1910.1200 & WHMIS Classification

Revision: N/A

Effective Date: 2015-03-05

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

1.1 Product identifier	
Product Name	UM171
Chemical Name	(1 <i>r</i> ,4 <i>r</i>)- <i>N</i> ¹ -(2-benzyl-7-(2-methyl-2 <i>H</i> -tetrazol-5-yl)-9 <i>H</i> -pyrimido[4,5- <i>b</i>]indol-4-yl)cyclohexane-1,4-diamine
Chemical formula	C ₂₅ H ₂₇ N ₉ • X HBr [X H ₂ O]
CAS No.	Not available
Catalog No.	72912 (250 µg), 72914 (1 mg)
EINECS No.	None assigned.
1.2 Recommended use of the chemical and restrictions on use	
Identified use(s)	To enhance the self-renewal of human hematopoietic stem cells in vitro by collaborating with aryl hydrocarbon receptor (AhR) antagonists in preventing differentiation of acute myeloid leukemia (AML) cells in culture.
Uses advised against	None known.
1.3 Details of the supplier of the Safety Data Sheet	
Company Identification	STEMCELL Technologies Inc. Suite 500-1618 Station Street Vancouver, British Columbia V6A 1B6 Canada
Telephone	1-604-877-0713
Fax	1-800-567-2899
E-Mail (competent person)	info@stemcell.com
1.4 Emergency telephone number	
Toll-free	1-800-667-0322

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	
US CFR 1910.1200/ Canada WHMIS Classification	Not classified as dangerous for supply/use.
2.2 Label elements	
Product Name	UM171
Hazard pictogram(s)	None.
Signal word(s)	None.
Hazard statement(s)	None.
Precautionary statement(s)	None.
Additional Information	NOTE: The toxicological properties of this product have not been fully evaluated.
2.3 Other hazards	None.
2.4 Additional Information	None.

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3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Substances

Hazardous Ingredient(s)	CAS No.	%W/W
(1 <i>r</i> ,4 <i>r</i>)- <i>N</i> ¹ -(2-benzyl-7-(2-methyl-2 <i>H</i> -tetrazol-5-yl)-9 <i>H</i> -pyrimido[4,5- <i>b</i>]indol-4-yl)cyclohexane-1,4-diamine	Not available	≥95%

3.2 Additional Information

None.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact

Wash skin with soap and water.

Eye Contact

Flush eyes with water for at least 15 minutes while holding eyelids open. If symptoms persist, obtain medical attention.

Ingestion

Wash out mouth with water and give 200 - 300 mL (half a pint) of water to drink. If symptoms persist, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIRE-FIGHTING MEASURES
5.1 Extinguishing Media

Suitable Extinguishing Media

As appropriate for surrounding fire.

Unsuitable Extinguishing Media

None known.

5.2 Special hazards arising from the substance or mixture

None known.

5.3 Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

No environmental hazards have been reported or known. Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning up

Sweep up spilled substance. Transfer to a container for disposal.

6.4 Reference to other sections

See Also Sections 8, 13

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7. SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling** General hygiene measures for the handling of chemicals are applicable. Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
- 7.2 Conditions for safe storage, including any incompatibilities** Protect from light.
- Storage Temperature 15 - 25°C
- Incompatible materials None known.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION





- 8.1 Control parameters**
- 8.1.1 Occupational Exposure Limits**

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
(1 <i>r</i> ,4 <i>r</i>)- <i>N</i> ¹ -(2-benzyl-7-(2-methyl-2 <i>H</i> -tetrazol-5-yl)-9 <i>H</i> -pyrimido[4,5- <i>b</i>]indol-4-yl)cyclohexane-1,4-diamine	-	-	-	-	-	NIOSH
		-	-	-	-	OSHA
		-	-	-	-	Canada (Ontario)
		-	-	-	-	Canada (Québec)

Source:

NIOSH = National Institute of Occupational Safety & Health

OSHA = Occupational Safety and Health Administration

- 8.2 Appropriate engineering controls** Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.
- 8.3 Individual protection measures, such as personal protective equipment (PPE)**
- Eye/face protection  Wear: Goggles.
- Skin protection (Hand protection/ Other)  Wear: Laboratory coat, Gloves.
- Respiratory protection  Handling of larger amounts: Wear suitable respiratory protective equipment.
- Thermal hazards  Not applicable.

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9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
9.1 Information on basic physical and chemical properties

Appearance	Solid.
Color	Yellow.
Odor	Odorless.
Odor Threshold	Not available.
pH	Not available.
Melting Point/Freezing Point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility (Water)	Not available.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

9.2 Other information

Molecular weight	453.54 g/mol
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10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions known if used for its intended purpose.
10.4 Conditions to avoid	Light.
10.5 Incompatible materials	None known.
10.6 Hazardous Decomposition Product(s)	No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects

Acute toxicity	Low acute toxicity.
Skin corrosion/irritation	Non-irritant
Serious eye damage/irritation	Not classified.
Respiratory or skin sensitization	It is not a skin sensitizer.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	None anticipated.
STOT - single exposure	None anticipated.
STOT - repeated exposure	None anticipated.
Aspiration hazard	None anticipated.
11.2 Other information	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

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12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	No environmental hazards have been reported or known.
12.2	Persistence and degradability	No information available.
12.3	Bioaccumulative potential	No information available.
12.4	Mobility in soil	No information available.
12.5	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Dispose of empty containers and wastes safely.
13.2	Additional Information	Disposal should be in accordance with provincial/state, local or national legislation.

14. SECTION 14: TRANSPORT INFORMATION
US D.O.T. and Canadian TDG Classification

Not classified as dangerous for transport.

14.1	UN number	Not applicable.
14.2	UN Proper Shipping Name	Not applicable.
14.3	Transport hazard class(es)	Not applicable.
14.4	Packing Group	Not applicable.
14.5	Environmental hazards	Not applicable.
14.6	Special precautions for user	Not applicable.
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

15. SECTION 15: REGULATORY INFORMATION
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1 USA

Toxic and hazardous substances (29 CFR 1910; Subpart Z)	Not listed.
National emission standards for hazardous air pollutants (40 CFR 61.01)	Not listed.
Title III Consolidated List of Lists	Not listed.
OSPAR List of Chemicals for Priority Action	Not listed.
State Right to Know Lists	Not listed.
TSCA (Toxic Substance Control Act)	Not listed.
Proposition 65 (California)	Not listed.
CAA 602 - Ozone Depleting Substances (ODS)	Not listed.

15.1.2 Canada

This product has been classified in accordance to CPR Section 12 and the MSDS contains all the information required by the CPR.

Domestic Substances List (DSL)	Not listed.
Export Control List	Not listed.
Priority Substances List (PSL)	Not listed.
Toxic Substances List	Not listed.
Ingredient Disclosure List	Not listed.
List of all Challenge Substances	Not listed.
National Pollutant Release Inventory (NPRI) Substances List	Not listed.

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16. SECTION 16: OTHER INFORMATION

NFPA		HMIS	
Health	0	Health	0
Fire	0	Flammability	0
Instability	0	Physical hazards	0

The following sections contain revisions or new statements: 1 - 16.

LEGEND

US CFR	United States Code of Federal Regulations
WHMIS	Workplace Hazardous Materials Information System
LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
US D.O.T.	United States Department of Transportation
TDG	Transportation of Dangerous Goods
MARPOL	International Convention for the Prevention of Pollution From Ships
IBC	International Bulk Chemical
OSPAR	Oslo and Paris Convention
CAA	Clean Air Act
CPR	Controlled Products Regulations
MSDS	Material Safety Data Sheet
NFPA	National Fire Protection Association
HMIS	Hazardous Material Information System

Disclaimers

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

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.