

Safety Data Sheet - Version 5.0

Preparation Date 10/24/2014 Latest Revision Date (If Revised) SDS Expiry Date 10/22/2017

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

1.1 Product Identifier

Chemical Name Agomelatine-d4

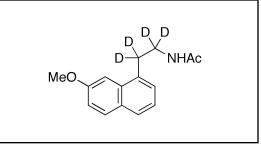
Catalogue # A430002

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Uses To be used only for scientific research and development. Not for use in humans or animals.

1.3 Details of the Supplier of the Safety Data Sheet

Company	Toronto Research Chemicals 2 Brisbane Road Toronto, ON M3J 2J8 CANADA				
Telephone FAX Email	+14166659696 +14166654439 orders@trc-canada.com				
1.4 Emergency Telephone Number					



Emergency# +14166659696 between 0800-1700 (GMT-5)

2. HAZARDS IDENTIFICATION

WHMIS Classification (Canada)

None Not WHMIS controlled.

WHMIS Symbols (Canada)

2.1/2.2 Classification of the Substance or Mixture and Label Elements <u>GHS Hazards Classification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)</u>

Acute Toxicity, Oral (Category 4)

Hazardous to the Aquatic Environment, Acute Hazard (Category 1)

EU Classification (According to EU Regulation 67/548/EEC)

Harmful if swallowed. Very toxic to aquatic organisms.

EU Risk and Safety Statements (According to EU Regulation 67/548/EEC)

Hazard Statements	Hazard Codes
Harmful	Xn
Environmental Hazard	Ν



Risk Codes and Phrases

R22 Harmful if swallowed.

R50 Very toxic to aquatic organisms.

Safety Precaution Codes and Phrases

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S46 If swallowed, seek medical advice immediately and show this container or label.

Toronto Research Chemicals - A430002Page 1This Safety Data Sheet contains 16 sections. All 16 sections must be present for this document to be valid.

S61 Avoid release to the environment. Refer to special instructions.

GHS Hazards Identification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)

Signal Word Warning

GHS Hazard Statements

H302	Harmful if swallowed.
H400	Very toxic to aquatic life.

GHS Precautionary Statements

P264	Wash hands thoroughly after handling.
P301/P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P273	Avoid release to the environment.
P391	Collect spillage.

2.3 Unclassified Hazards/Hazards Not Otherwise Classified

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Molecular Formula: C₁₅H₁₃D₄NO₂

Molecular Weight: 247.33 EC#:

CAS Registry #: Synonyms

N-[2-(7-Methoxy-1-naphthalenyl)ethyl-d4]acetamide; N-[2-(7-Methoxy-1-naphthyl) ethyl]acetamide-d4; S 20098-d4; Valdoxan-d4;

3.2 Mixtures

Not a mixture

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice

If medical attention is required, show this safety data sheet to the doctor.

If Inhaled

If inhaled, move casualty to fresh air. If not breathing, give artificial respiration and consult a physician.

In Case of Skin Contact

Wash affected area with soap and water. Consult a physician if any exposure symptoms are observed.

In Case of Eye Contact

Immediately rinse eyes with plenty of water for at least 15 minutes. Consult a physician.

If Swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Do NOT induce vomiting unless advised to do so by a physician or Poison Control Center. Seek medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

No data available

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special Hazards Arising from the Substance or Mixture

Toronto Research Chemicals - A430002Page 2This Safety Data Sheet contains 16 sections. All 16 sections must be present for this document to be valid.



5.3 Advice for Firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further Information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use recommended personal protective equipment (see Section 8). Prevent the formation of dusts and mists. Adequate ventilation must be provided to ensure dusts or mists are not inhaled.

6.2 Environmental Precautions

Material should not be allowed to enter the environment. Prevent further spillage or discharge into drains, if safe to do so.

6.3 Methods and Materials for Containment and Cleaning Up

Contain the spill and then collect using non-combustible absorbent material (such as clay, diatomaceous earth, vermiculite or other appropriate material). Place material in a suitable, sealable container and then dispose according to local/national regulations and guidance (see Section 13).

For protective equipment, refer to Section 8. For disposal, see Section 13.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact with skin and eyes. Ventilation and proper handling are to be used to prevent the formation of dusts and mists. Normal measures for preventative fire protection. No smoking, eating or drinking around this material. Wash hands after use.

7.2 Conditions for Safe Storage, Including any Incompatibilities

Ensure container is kept securely closed before and after use. Keep in a well ventilated area and do not store with strong oxidizers or other incompatible materials (see Section 10).

Storage conditions: No Data Available

7.3 Specific End Uses

For scientific research and development only. Not for use in humans or animals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Contains no components with established occupation exposure limits.

8.2 Exposure Controls

Appropriate Engineering Controls

A laboratory fumehood or other appropriate form of local exhaust ventilation should be used to avoid exposure.

Personal Protective Equipment

All recommendations below are advisory in nature and a risk assessment should be performed by the employer/end user prior to use of this product. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

Eye/Face Protection

Safety glasses or safety goggles. All equipment should have been tested and approved under appropriate standards, such as NIOSH (US), CSA (Canada), or EN 166 (EU).

Skin Protection

Gloves should be used when handling this material. Gloves are to be inspected prior to use. Contaminated gloves are to be removed using proper glove removal technique so that the outer surface of the glove does not contact bare skin. Dispose of contaminated gloves after use in compliance with good laboratory practices and local requirements.

Gloves used for incidental exposures (splash protection) should be designated as "low chemical resistant" or "waterproof" by EU standard EN 374. Unrated gloves are not recommended. Suggested gloves: AnsellPro nitrile gloves style 92-500 or 92-600, 5 mil thickness. Penetration time has not been determined.

Toronto Research Chemicals - A430002Page 3This Safety Data Sheet contains 16 sections. All 16 sections must be present for this document to be valid.

Gloves used for prolonged direct exposure (immersion) should be designated "chemical resistant" as per EN 734 with the resistance codes corresponding to the anticipated use of the material.

Suggested gloves: AnsellPro Viton/Butyl gloves style 38-612, 4/8 mil thickness.

Penetration time has not been determined.

These recommendations may not apply if the material is mixed with any other chemical, or dissolved into a solution. A risk assessment must be performed to ensure the gloves will still offer acceptable protection.

Body Protection

Fire resistant (Nomex) lab coat or coveralls.

Respiratory Protection

Recommended respirators are NIOSH-approved N95 or CEN-approved FFP2 particulate respirators. These are to be only used as a backup to local exhaust ventilation or other engineering controls. If the respirator is the only means of protection, a full-face supplied air respirator must be used.

9. PHYSICAL AND CHEMICAL PROPER 9.1 Information on Basic Physical and Chemica	
A) Appearance	B) Odour
No Data Available	No data available
C) Odour Threshold	D) pH
No data available	No data available
E) Melting Point/Freezing Point	F) Initial Boiling Point/Boiling Range
No Data Available	No data available
G) Flash point	H) Evaporation Rate
No data available	No data available
 I) Flammability (Solid/Gas) No data available K) Vapour Pressure 	 J) Upper/Lower Flammability/Explosive Limits No data available L) Vapour Density
No data available	No data available
M) Relative Density	N) Solubility
No data available	No Data Available
O) Partition Coefficient: n-octanol/water	P) Auto-Ignition Temperature
No data available	No data available
Q) Decomposition Temperature	R) Viscosity
No data available	No data available
S) Explosive Properties	T) Oxidizing Properties
No data available	No data available
9.2 Other Information no data available	
10. STABILITY AND REACTIVITY	
<u>10.1 Reactivity</u> No data available	
10.2 Chemical Stability	

Stable at recommended storage conditions.

10.3 Possibility of Hazardous Reactions

No data available

10.4 Conditions to Avoid

No data available

10.5 Incompatible Materials

Strong oxidizing materials.

10.6 Hazardous Decomposition Products

No data available

11. TOXICOLOGICAL INFORMATION

Toronto Research Chemicals - A430002

Page 4

This Safety Data Sheet contains 16 sections. All 16 sections must be present for this document to be valid.

11.1 Information on Toxicological Effects A) Acute Toxicity LD50 (oral - mouse) > 1000 mg/kg **B) Skin Corrosion/Irritation** No data available C) Serious Eye Damage/Irritation No data available D) Respiratory or Skin Sensitization No data available E) Germ Cell Mutagenicity No data available F) Carcinogenicity No data available G) Reproductive Toxicity/Teratogenicity No data available H) Single Target Organ Toxicity - Single Exposure No data available I) Single Target Organ Toxicity - Repeated Exposure No data available J) Aspiration Hazard No data available K) Potential Health Effects and Routes of Exposure Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion Harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eves May cause eye irritation. L) Signs and Symptoms of Exposure No data available To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated. **M)** Additional Information RTECS: AC5956323

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistance and Degradability

No data available

12.3 Bioaccumulative Potential

No data available

12.4 Mobility in Soil

No data available

12.5 Results of PBT and vPvB Assessment

No data available

12.6 Other Adverse Effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

A) Product

Toronto Research Chemicals - A430002

Page 5

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Product may be burned in an incinerator equipped with afterburner and scrubber. Excess and expired materials are to be offered to a licensed hazardous material disposal company. Ensure that all Federal and Local regulations regarding the disposal and destruction of this material are followed.

B) Contaminated Packaging

Dispose of as above.

C) Other Considerations

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Product is not to be disposed of in sanitary sewers, storm sewers, or landfills.							
14. TRANSPORT INFORMATION							
14.1 UN Number							
DOT (US): N/A	IATA: 3077	IMDG: 3077	ADR/RID: 3077				
14.2 UN Proper Shipping Nam	<u>e</u>						
DOT (US)/IATA:	Not dangerous goods / Environmentally hazardous substance, solid, n.o.s. (Agomelatine-d4)						
IMDG/ARD/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Agomelatine-d4)							
14.3 Transport Hazard Class(es)							
DOT (US): N/A	IATA: 9	IMDG: 9	ADR/RID: 9				
14.4 Packing Group							
DOT (US): N/A	IATA: III	IMDG: III	ADR/RID: III				
14.5 Environmental Hazards							
DOT (US): None	IATA: Marine pollutant	IMDG: Marine pollutant	ADR/RID: Marine pollutant				
14.6 Special Precautions for U							
None							
15. REGULATORY INFOR	MATION						
This safety data sheet complies	with the requirements of W	HMIS (Canada), OSHA 1910	0.1200 (US), and EU Regulation				
EC No. 1907/2006 (European L							
15.1 Safety, Health and Enviro	nmental Regulations/Legis	slation Specific for the Sub	stance or Mixture				
A) Canada							
DSL/NDSL Status: This pro	duct is not listed on the Can	adian DSL/NDSL.					
DSL/NDSL Status: This pro B) United States							
DSL/NDSL Status: This pro B) United States TSCA Status: This product							
DSL/NDSL Status: This pro B) United States TSCA Status: This product C) European Union	is not listed on the US EPA 1	ISCA.					
DSL/NDSL Status: This pro B) United States TSCA Status: This product C) European Union ECHA Status: This product	is not listed on the US EPA T is not registered with the EU	ISCA.					
DSL/NDSL Status: This pro B) United States TSCA Status: This product C) European Union ECHA Status: This product 15.2 Chemical Safety Assessn	is not listed on the US EPA T is not registered with the EU	ISCA.					
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- LC50 Medial lethal concentration of a substance required to kill 50% of a test population.
- LDLo Lowest known lethal dose
- Lowest known toxic dose TDLo
- International Agency for Research on Cancer IARC
- NTP National Toxicology Program
- RTECS Registry of Toxic Effects of Chemical Substances

16.3 Further Information

Copyright 2013. Toronto Research Chemicals Inc. Copies may be made for internal use only. The above information is believed to be correct to the best of our knowledge, but is to be only used as a guide. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Please take all due care when handling this product.