

# SAFETY DATA SHEET

Version 6.3 Revision Date 02/19/2021 Print Date 05/05/2021

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

#### 1.1 Product identifiers

Product name : Aripiprazole-dg solution

Product Number : A-081
Brand : Cerilliant
Index-No. : 608-001-00-3

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

Identified uses : Laboratory chemicals, Synthesis of substances

#### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.

3050 Spruce Street ST. LOUIS MO 63103

UNITED STATES OF AMERICA (THE)

Telephone : +1 314 771-5765 Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-

527-3887 CHEMTREC (International) 24

Hours/day; 7 Days/week

#### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312 Eye irritation (Category 2A), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Cerilliant - A-081

Millipore SigMa

Hazard statement(s) H225 H302 + H312 + H332 H319	Highly flammable liquid and vapor. Harmful if swallowed, in contact with skin or if inhaled. Causes serious eye irritation.
Precautionary statement(s) P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233 P240 P241 P242 P243	Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
P261 P264 P270	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.
P271 P280 P301 + P312 + P330	Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 P363	If eye irritation persists: Get medical advice/ attention. Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P235 P501	Store in a well-ventilated place. Keep cool.  Dispose of contents/ container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

# **SECTION 3: Composition/information on ingredients**

# 3.2 Mixtures

Component		Classification	Concentration
Acetonitrile			
CAS-No.	75-05-8	Flam. Liq. 2; Acute Tox. 4;	>= 90 - <=
EC-No.	200-835-2	Eye Irrit. 2A; H225, H302,	100 %
Index-No.	608-001-00-3	H332, H312, H319	
Registration	01-2119471307-38-		
number	XXXX		

For the full text of the H-Statements mentioned in this Section, see Section 16.



#### **SECTION 4: First aid measures**

# 4.1 Description of first-aid measures

#### **General advice**

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

# 4.3 Indication of any immediate medical attention and special treatment needed No data available

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Foam Carbon dioxide (CO2) Dry powder

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Combustible.

Pay attention to flashback.

Vapors are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.

#### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### **5.4** Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

# 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

#### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

#### 6.4 Reference to other sections

For disposal see section 13.

## **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

#### Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

## Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

#### **Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

#### Storage stability

Recommended storage temperature

-20 °C

Storage class (TRGS 510): 3: Flammable liquids

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

**Ingredients with workplace control parameters** 



Component	CAS-No.	Value	Control parameters	Basis		
Acetonitrile	75-05-8	TWA	20 ppm	USA. ACGIH Threshold Limit Values (TLV)		
	Remarks	Not classif	Not classifiable as a human carcinogen			
		Danger of cutaneous absorption				
		TWA	20 ppm	USA. NIOSH Recommended		
			34 mg/m3	Exposure Limits		
		TWA	40 ppm	USA. Occupational Exposure		
			70 mg/m3	Limits (OSHA) - Table Z-1		
				Limits for Air Contaminants		
		The value in mg/m3 is approximate.				
		PEL	40 ppm 70 mg/m3	California permissible exposure limits for chemical		
				contaminants (Title 8, Article 107)		
		Skin				
		STEL	60 ppm 105 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)		
		Skin				
		TWA	40 ppm 70 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000		
		STEL	60 ppm 105 mg/m3	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000		

# 8.2 Exposure controls

#### **Appropriate engineering controls**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

#### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

#### Skin protection

required

# **Body Protection**

Flame retardant antistatic protective clothing.

# **Respiratory protection**

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

## **Control of environmental exposure**

Do not let product enter drains. Risk of explosion.



## **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

b) Odor No data available

c) Odor Threshold No data available

d) pH No data available

e) Melting No data available point/freezing point

f) Initial boiling point 81 - 82 °C 178 - 180 °F at 1.013 hPa and boiling range

g) Flash point 2 °C (36 °F) - closed cup

h) Evaporation rate No data availablei) Flammability (solid, qas)i) No data available

j) Upper/lower Upper explosion limit: 16 %(V) flammability or Lower explosion limit: 4.4 %(V)

k) Vapor pressure
l) Vapor density
m) Relative density
n) Water solubility
No data available
No data available
No data available

o) Partition coefficient: No data available n-octanol/water

p) Autoignition No data available temperature

q) Decomposition No data available temperature

r) Viscosity No data availables) Explosive properties No data availablet) Oxidizing properties No data available

#### 9.2 Other safety information

explosive limits

No data available

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Vapors may form explosive mixture with air.

## 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

# 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Warming.

#### 10.5 Incompatible materials

acids, Bases, Oxidizing agents, Alkali metals

# 10.6 Hazardous decomposition products

In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Mixture**

# **Acute toxicity**

No data available

Inhalation: No data available Dermal: No data available

No data available

#### Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

Mixture causes serious eye irritation.

# Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: No ingredient 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 ingredient 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

on OSHA's list of regulated carcinogens.

#### Reproductive toxicity

No data available

# Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

#### 11.2 Additional Information

Not available

Treat as cyanide poisoning., Always have on hand a cyanide first-aid kit, together with proper instructions., The onset of symptoms is generally delayed pending conversion to cyanide., Nausea, Vomiting, Diarrhea, Headache, Dizziness, Rash, Cyanosis

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Lungs - Lung edema - Based on Human Evidence

#### **Components**

#### **Acetonitrile**

#### **Acute toxicity**

LD50 Oral - Mouse - male and female - 617 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Mouse - male and female - 4 h - 6.022 mg/l

(OECD Test Guideline 403)

Acute toxicity estimate Dermal - 1,500 mg/kg

(Expert judgment)

Dermal: No data available

No data available

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye irritation.

(OECD Test Guideline 405)

Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

## Respiratory or skin sensitization

Buehler Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

#### Germ cell mutagenicity

Ames test

S. typhimurium

Result: negative

Remarks:

(ECHA)

In vitro mammalian cell gene mutation test

Chinese hamster ovary cells

Result: negative

Mutagenicity (mammal cell test): chromosome aberration.

Chinese hamster ovary cells

Result: Positive results were obtained in some in vitro tests.

Remarks:

(National Toxicology Program)



sister chromatid exchange assay Chinese hamster ovary cells

Result: negative

Remarks:

Sister chromatid exchange Saccharomyces cerevisiae

Result: positive

Remarks:

Cytogenetic analysis

(ECHA)

In vitro mammalian cell gene mutation test

Mouse lymphoma test

Result: negative

OECD Test Guideline 474 Mouse - male and female

Result: negative

# Carcinogenicity

No evidence of carcinogenicity in animal studies.

#### Reproductive toxicity

Animal testing did not show any effects on fertility.

# Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

# Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### **Aspiration hazard**

No aspiration toxicity classification

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

#### **Mixture**

No data available

#### 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 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available



# **Components**

#### **Acetonitrile**

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead

minnow) - 1,640 mg/l - 96 h

Remarks: (ECHA)

Toxicity to algae static test NOEC - Phaeodactylum tricornutum - 400 mg/l - 72

h

(ISO 10253)

static test ErC50 - Phaeodactylum tricornutum - 9,696 mg/l -

72 h

(ISO 10253)

Toxicity to bacteria

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and loc No mixing with other waste. Handle uncleaned containers like the product See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

#### **SECTION 14: Transport information**

#### DOT (US)

UN number: 1648 Class: 3 Packing group: II

Proper shipping name: AcetonitrileSOLUTION

Reportable Quantity (RQ): Poison Inhalation Hazard: No

**IMDG** 

UN number: 1648 Class: 3 Packing group: II EMS-No: F-E, S-D

Proper shipping name: ACETONITRILESOLUTION

**IATA** 

UN number: 1648 Class: 3 Packing group: II

Proper shipping name: AcetonitrileSOLUTION

# **SECTION 15: Regulatory information**

# **SARA 302 Components**

This material does not contain any components with a section 302 EHS TPQ.

# **SARA 313 Components**

Cerilliant - A-081

Page 10 of 11

The following components are subject to reporting levels established by SARA Title III, Section 313:

Acetonitrile CAS-No. Revision Date 75-05-8 2007-07-01

#### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

# **Massachusetts Right To Know Components**

Acetonitrile CAS-No. Revision Date 75-05-8 2007-07-01

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components** 

Acetonitrile CAS-No. Revision Date 75-05-8 2007-07-01

**New Jersey Right To Know Components** 

Acetonitrile CAS-No. Revision Date 75-05-8 2007-07-01

#### **SECTION 16: Other information**

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Version: 6.3 Revision Date: 02/19/2021 Print Date: 05/05/2021

