

# SAFETY DATA SHEET

Version 6.8 Revision Date 03/18/2021 Print Date 11/27/2021

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

#### 1.1 Product identifiers

Product name : ProClin® 300

Product Number : 48914-U
Brand : Sigma-Aldrich

# 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 ST ST. LOUIS MO 63103 UNITED STATES

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)

Acute toxicity, Oral (Category 4), H302

Acute toxicity, Inhalation (Category 4), H332

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Skin sensitization (Category 1), H317

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 1), H410

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 Sigma-Aldrich - 48914-U Danger



Hazard statement(s) H302 + H332 H314 H317 H410	Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271 P272	Use only outdoors or in a well-ventilated area.  Contaminated work clothing must not be allowed out of the
P2/2	workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 +	IF IN EYES: Rinse cautiously with water for several minutes.
P310	Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P405	Store locked up.
P501	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		
Modified alkyl carboxylate					
	•	Aquatic Chronic 4; H413	>= 5 - < 10 %		
Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)					
CAS-No. EC-No. Index-No.	55965-84-9 911-418-6 613-167-00-5	Acute Tox. 3; Acute Tox. 2; Skin Corr. 1C; Eye Dam. 1; Skin Sens. 1A; Aquatic Acute 1; Aquatic Chronic 1; H301, H330,	>= 1 - < 5 %		



H400, H410	
Concentration limits:	
>= 0.6 %: Skin Corr. 1B,	
H314; 0.06 - < 0.6 %:	
Skin Irrit. 2, H315; 0.06 -	
< 0.6 %: Eye Irrit. 2,	
H319; >= 0.0015 %: Skin	
Sens. 1A, H317;	
M-Factor - Aquatic Acute:	
100 - Aquatic Chronic: 100	

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**

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

# If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

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

# In case of eye contact

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

#### If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

### 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

Water 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)

Sulfur oxides

Hydrogen chloride gas

Carbon oxides

Nitrogen oxides (NOx)

Sulfur oxides

Hydrogen chloride gas

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

#### 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

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. 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.

#### 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 and neutralising material (e.g. Chemizorb® H<sup>+</sup>, Merck Art. No. 101595). 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.

#### 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



Tightly closed.

Storage class (TRGS 510): 8A: Combustible, corrosive hazardous materials

# 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

Contains no substances with occupational exposure limit values.

# 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). Tightly fitting safety goggles

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm Break through time: 480 min

Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 60 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

# **Body Protection**

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.

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

# 9.1 Information on basic physical and chemical properties

-	inormation on basic	priyorcar and enclinear propertic
а	a) Appearance	Form: liquid
b	o) Odor	No data available
С	c) Odor Threshold	No data available
d	d) pH	4.1 at 100 g/l
е	e) Melting point/freezing point	-40 °C (-40 °F)
f	) Initial boiling point and boiling range	189 °C 372 °F
g	g) Flash point	118 °C (244 °F) - closed cup
h	n) Evaporation rate	No data available
i)	) Flammability (solid, gas)	No data available
j	) Upper/lower flammability or explosive limits	No data available
k	() Vapor pressure	No data available
I)	) Vapor density	No data available
n	n) Relative density	No data available
n	n) Water solubility	soluble
0	<ul><li>Partition coefficient: n-octanol/water</li></ul>	No data available
p	o) Autoignition temperature	No data available
q	q) Decomposition temperature	No data available
r	) Viscosity	No data available
S	s) Explosive properties	No data available
t	) Oxidizing properties	No data available

# 9.2 Other safety information

No data available



# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

# 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

Strong heating.

#### 10.5 Incompatible materials

Strong oxidizing agents, Reducing agents, Amines, Mercaptans

# 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**

LD50 Oral - Rat - 862 mg/kg

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.

Inhalation: No data available

Acute toxicity estimate Inhalation - 4 h - 13.89 mg/l

(Calculation method)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of

respiratory tract

LD50 Dermal - Rabbit - 2,800 mg/kg

Dermal: No data available

No data available

#### Skin corrosion/irritation

Skin - Rabbit Result: Corrosive Mixture causes burns.

# Serious eye damage/eye irritation

Eyes - Rabbit

Result: Corrosive to eyes

Mixture causes serious eye damage. Risk of blindness!



# Respiratory or skin sensitization

- Guinea pig

Result: May cause sensitization by skin contact. Mixture may cause an allergic skin reaction.

# 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 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

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

# **Components**

# Modified alkyl carboxylate

# **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

No data available

# Respiratory or skin sensitization

No data available

# Germ cell mutagenicity

No data available

#### Carcinogenicity

# 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

# Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)

# **Acute toxicity**

LD50 Oral - Rat - male and female - 66 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - 0.171 mg/l

(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male - 87.12 mg/kg

Remarks:

(ECHA)

No data available

#### Skin corrosion/irritation

Skin - Rabbit

Result: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.

(OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye damage.

Remarks: (ECHA)

# Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: positive

(OECD Test Guideline 406)

#### Germ cell mutagenicity



Ames test

Salmonella typhimurium

Result: positive

In vitro mammalian cell gene mutation test

mouse lymphoma cells

Result: positive Ames test

Salmonella typhimurium

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

UDS (Unscheduled DNA synthesis assay)

rat hepatocytes Result: negative

Mutagenicity (mammal cell test): chromosome aberration.

Human lymphocytes Result: positive

**OECD Test Guideline 475** 

Mouse - male and female - Bone marrow

Result: negative

OECD Test Guideline 486 Rat - male - Liver cells

Result: negative

**US-EPA** 

Mouse - male and female - Bone marrow

Result: negative

**US-EPA** 

Rat - male - Liver cells Result: negative

OECD Test Guideline 474

Mouse - male and female - Red blood cells (erythrocytes)

Result: negative

# Carcinogenicity

# 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

# **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

#### Components

# Modified alkyl carboxylate

No data available

# Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)

Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout)

- 0.19 mg/l - 96 h

(US-EPA)

Toxicity to daphnia flow-through test LC50 - Daphnia magna (Water flea) - 0.18

and other aquatic mg/l - 48 h invertebrates (US-EPA)

Toxicity to bacteria static test EC50 - activated sludge - 4.5 mg/l - 3 h

(OECD Test Guideline 209)

# **SECTION 13: Disposal considerations**

# 13.1 Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. 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: 3265 Class: 8 Packing group: II

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (Mixture of 5-Chloro-2-

methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1))

Reportable Quantity (RQ): Poison Inhalation Hazard: No

**IMDG** 

UN number: 3265 Class: 8 Packing group: II EMS-No: F-A, S-B Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1))

Marine pollutant : yes

**IATA** 

UN number: 3265 Class: 8 Packing group: II

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Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1))

# **SECTION 15: Regulatory information**

# **SARA 302 Components**

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

### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# SARA 311/312 Hazards

Acute Health Hazard

# **Massachusetts Right To Know Components**

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

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

Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one 55965-84-9

**Pennsylvania Right To Know Components** 

and 2-Methyl-2H -isothiazol-3-one (3:1)

Glycols	CAS-No. -	Revision Date
Modified alkyl carboxylate	-	
Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)	55965-84-9	
New Jersey Right To Know Components Glycols	CAS-No.	Revision Date
Modified alkyl carboxylate	-	

#### **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.

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