# SIGMA-ALDRICH

sigma-aldrich.com SAFETY DATA SHEET Version 4.5

Revision Date 08/21/2014 Print Date 11/10/2018

# 1. PRODUCT AND COMPANY IDENTIFICATION

1.1	<b>Product identifiers</b> Product name	:	(1 <i>R</i> ,2 <i>R</i> )- <i>N</i> , <i>N</i> '-Bis(2-acetyl-3-oxo-2-butenylidene)- 1,2-dimesitylethylenediaminato cobalt(II)
	Product Number Brand	:	708550 Aldrich
	CAS-No.	:	361346-80-7
1.2	2 Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	:	Laboratory chemicals, Manufacture of substances
1.3	3 Details of the supplier of the safety data sheet		
	Company	:	Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA
	Telephone Fax	:	+1 800-325-5832 +1 800-325-5052
1.4	4 Emergency telephone number		
	Emergency Phone #	:	+1-703-527-3887 (CHEMTREC)
	Fax Emergency telephone num	: nbe	+1 800-325-5832 +1 800-325-5052

# 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 Acute toxicity, Dermal (Category 4), H312 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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	Warning
Hazard statement(s) H302 + H312 + H332 H315 H319 H335	Harmful if swallowed, in contact with skin or if inhaled Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Precautionary statement(s) P261 P264 P270	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.
700550	

P271 P280 P301 + P312	Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/ physician if you feel unwell.
P322	Specific measures (see supplemental first aid instructions on this label).
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
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

# **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances Synonyms	:	(R,R)-AMAC
Formula Molecular weight CAS-No.	:	C <sub>32</sub> H <sub>38</sub> CoN <sub>2</sub> O <sub>4</sub> 573.59 g/mol 361346-80-7

No components need to be disclosed according to the applicable regulations. For the full text of the H-Statements mentioned in this Section, see Section 16.

# 4. FIRST AID MEASURES

3.1

# 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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

# **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 Carbon oxides, Nitrogen oxides (NOx), Cobalt/cobalt oxides

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

# 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. 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 Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections

For disposal see section 13.

# 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection. For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Handle and store under inert gas.

#### 7.3 Specific end use(s)

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

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

#### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### 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.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Control of environmental exposure

Do not let product enter drains.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: solid	
b)	Odour	No data available	
c)	Odour Threshold	No data available	
d)	рН	No data available	
e)	Melting point/freezing point	Melting point/range: 246 - 250 °C (475 - 482 °F)	
f)	Initial boiling point and boiling range	No data available	
g)	Flash point	No data available	
h)	Evaporation rate	No data available	
i)	Flammability (solid, gas)	No data available	
j)	Upper/lower flammability or explosive limits	No data available	
k)	Vapour pressure	No data available	
I)	Vapour density	No data available	
m)	Relative density	No data available	
n)	Water solubility	No data available	
o)	Partition coefficient: n- octanol/water	No data available	
p)	Auto-ignition temperature	No data available	
q)	Decomposition temperature	No data available	
r)	Viscosity	No data available	
s)	Explosive properties	No data available	
t)	Oxidizing properties	No data available	
Other safety information No data available			

#### **10. STABILITY AND REACTIVITY**

# 10.1 Reactivity

9.2

No data available

#### **10.2** Chemical stability Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions** No data available

# 10.4 Conditions to avoid

No data available

#### **10.5** Incompatible materials Oxidizing agents

**10.6 Hazardous decomposition products** Other decomposition products - No data available In the event of fire: see section 5

# **11. TOXICOLOGICAL INFORMATION**

#### 11.1 Information on toxicological effects

#### Acute toxicity No data available

No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

**Respiratory or skin sensitisation** No data available

Germ cell mutagenicity No data available

#### 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.

#### Reproductive toxicity

No data available

No data available

**Specific target organ toxicity - single exposure** Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

Additional Information RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

No data available

#### 12.2 Persistence and degradability No data available

#### **12.3 Bioaccumulative potential** No data available

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

# **13. DISPOSAL CONSIDERATIONS**

# 13.1 Waste treatment methods

# Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

# Contaminated packaging

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

# DOT (US)

Not dangerous goods

# IMDG

Not dangerous goods

# ΙΑΤΑ

Not dangerous goods

# **15. REGULATORY INFORMATION**

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

# 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.

Pennsylvania Right To Know Components		
	CAS-No.	Revision Date
(1R,2R)-N,N'-Bis(2-acetyl-3-oxo-2-butenylidene)-1,2- dimesitylethylenediaminato cobalt(II)	361346-80-7	
New Jersey Right To Know Components		
	CAS-No.	Revision Date
(1R,2R)-N,N'-Bis(2-acetyl-3-oxo-2-butenylidene)-1,2- dimesitylethylenediaminato cobalt(II)	361346-80-7	

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# **16. OTHER INFORMATION**

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

# **HMIS Rating**

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Health hazard:	2
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0
NFPA Rating	

Health hazard:	2
Fire Hazard:	0
Reactivity Hazard:	0

#### **Further information**

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### **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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