

### Safety Data Sheet dated 23/1/2020, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: MI-KU THERM

Trade code: N958

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

Recommended use:

Coating material

1.3. Details of the supplier of the safety data sheet

Company:

NOVACÓLOR S.R.L Via U. Aldrovandi, 10 47122 Forlì (FC) - Italy -Tel. +39 0543 401840

Fax. +39 0543 414585

Competent person responsible for the safety data sheet:

reach@novacolor.biz

1.4. Emergency telephone number

Technical information: NOVACOLOR SRL +39 0543 401840 (Monday – Friday 8.00-12.00; 13.30-17.30)

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

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

EUH208 Contains 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH208 Contains reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7]

and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards



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

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number		Classification
>= 0.01% - < 0.05%	2-octyl-2H-isothiazol-3- one	Index number: CAS: EC:	613-112-00-5 26530-20-1 247-761-7	<ul> <li> ♦ 3.1/3/Inhal Acute Tox. 3 H331</li> <li>♦ 3.2/1B Skin Corr. 1B H314</li> <li>♦ 3.3/1 Eye Dam. 1 H318</li> <li> ∮ 3.4.2/1A Skin Sens. 1A H317</li> <li>♦ 4.1/A1 Aquatic Acute 1 H400 M=10.</li> <li>♦ 4.1/C1 Aquatic Chronic 1 H410 M=1.</li> <li>♦ 3.1/3/Dermal Acute Tox. 3 H311</li> <li>∮ 3.1/4/Oral Acute Tox. 4 H302</li> </ul>
	1,2-benzisothiazol- 3(2H)-one	Index number: CAS: EC:	613-088-00-6 2634-33-5 220-120-9	<ul> <li> ♦ 3.1/2/Inhal Acute Tox. 2 H330</li> <li>♦ 3.2/2 Skin Irrit. 2 H315</li> <li>♦ 3.3/1 Eye Dam. 1 H318</li> <li>♦ 3.4.2/1 Skin Sens. 1 H317</li> <li>♦ 3.1/4/Oral Acute Tox. 4 H302</li> <li>♦ 4.1/A1 Aquatic Acute 1 H400</li> <li>M=1.</li> <li>♦ 4.1/C2 Aquatic Chronic 2 H411</li> <li>M=1.</li> </ul>
>= 0. 00015% - < 0. 0015%	reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Index number: CAS: EC:	613-167-00-5 55965-84-9 611-341-5	<ul> <li>         3.2/1B Skin Corr. 1B H314         <ul> <li></li></ul></li></ul>

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

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

- 4.2. Most important symptoms and effects, both acute and delayed
- 4.3. Indication of any immediate medical attention and special treatment needed Treatment: None

N958/1

Page n. 2 of 9



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

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

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

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

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

8.1. Control parameters

No occupational exposure limit available

**DNEL Exposure Limit Values** 

N.A.

PNEC Exposure Limit Values

ΝÁ

8.2. Exposure controls

N958/1

Page n. 3 of 9



Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

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

9.1. Information on basic physical and chemical properties

Appearance: liquid various
Odour: characteristic

Odour threshold: N.A. pH: 9
Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density:

Flash point:

Evaporation rate:

Vapour pressure:

Relative density:

Solubility in oil:

N.A.

N.A.

N.A.

0.71 kg/l

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.

9.2. Other information

Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

Substance Groups relevant properties N.A.

#### **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 None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products None.

N958/1

Page n. 4 of 9



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

11.1. Information on toxicological effects

Toxicological information of the product:

MI-KU THERM

a) acute toxicity

Not classified

No data available for the product

b) skin corrosion/irritation

Not classified

No data available for the product

c) serious eye damage/irritation

Not classified

No data available for the product

d) respiratory or skin sensitisation

Not classified

No data available for the product

e) germ cell mutagenicity

Not classified

No data available for the product

f) carcinogenicity

Not classified

No data available for the product

g) reproductive toxicity

Not classified

No data available for the product

h) STOT-single exposure

Not classified

No data available for the product

i) STOT-repeated exposure

Not classified

No data available for the product

j) aspiration hazard

Not classified

No data available for the product

Toxicological information of the main substances found in the product:

N.A.

#### **SECTION 12: Ecological information**

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

MI-KU THERM

Not classified for environmental hazards

No data available for the product

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 0.42 mg/l - Duration h: 48 - Notes: OECD 202

Endpoint: EC50 - Species: Algae 0.084 mg/l - Duration h: 72 - Notes: Scenedesmus

subspicatus - OECD 201

Endpoint: LC50 - Species: Fish 0.036 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss

- OECD 203

Endpoint: NOEC - Species: Daphnia 0.002 mg/l - Notes: 21d - OECD 211

Endpoint: NOEC - Species: Fish 0.022 mg/l - Notes: 28d Oncorhynchus mykiss - OECD

210

Endpoint: NOEC - Species: Algae 0.004 mg/l - Notes: 72d - OECD 201

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5

a) Aquatic acute toxicity:

N958/1

Page n. 5 of 9



Endpoint: IC50 - Species: Algae 0.04 mg/l - Duration h: 72 - Notes: (Selenastrum capricornutum) (OECD 201)

Endpoint: EC50 - Species: Algae 0.11 mg/l - Duration h: 72 - Notes: (Selenastrum capricornutum) (OECD 201) S2238

Endpoint: EC50 - Species: Daphnia 3.27 mg/l - Duration h: 48 - Notes: (OECD 202) S 2240

Endpoint: LC50 - Species: Fish 1.6 mg/l - Duration h: 96 - Notes: (Oncorhynchus mykiss) (OECD 203) S 2746

Endpoint: NOEC - Species: Daphnia 1.2 mg/l - Notes: 21 d (OECD 211) S 803 Endpoint: NOEC - Species: Fish 0.21 mg/l - Notes: 28 d (OECD 215) S 805

reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) - CAS: 55965-84-9

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 0.1 mg/l - Duration h: 48 - Notes: daphnia magna Endpoint: EC50 - Species: Algae 0.048 mg/l - Duration h: 72 - Notes: pseudokirchneriella subcapitata

Endpoint: EC50 - Species: Fish 0.22 mg/l - Duration h: 96 - Notes: oncorhynchus mykiss Endpoint: NOEC - Species: Algae 0.00064 mg/l - Duration h: 48 - Notes: skeletonema

Endpoint: NOEC - Species: Daphnia 0.004 mg/l - Duration h: 504 - Notes: daphnia magna Endpoint: NOEC - Species: Fish 0.098 mg/l - Duration h: 672 - Notes: oncorhynchus

Endpoint: NOEC - Species: Algae 0.0012 mg/l - Duration h: 72 - Notes: pseudokirchneriella subcapitata

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

### **SECTION 13: Disposal considerations**

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

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

14.1. UN number

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

limited quantity:

N.A.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code N A

N958/1

Page n. 6 of 9



### **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/699 (ATP 11 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions:

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

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

Full text of phrases referred to in Section 3:

H331 Toxic if inhaled.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H311 Toxic in contact with skin.

H302 Harmful if swallowed.

H330 Fatal if inhaled.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

H301 Toxic if swallowed.



Hazard class and hazard category	Code	Description	
Acute Tox. 1	3.1/1/Inhal	Acute toxicity (inhalation), Category 1	
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2	
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3	
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3	
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3	
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4	
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B	
Skin Irrit. 2	3.2/2	Skin irritation, Category 2	
Eye Dam. 1	3.3/1	Serious eye damage, Category 1	
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1	
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A	
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1	
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1	
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2	

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

N958/1

Page n. 8 of 9



Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO).

IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWA: Time-weighted average
WGK: German Water Hazard Class.