

MUROSILAN THERM



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** MUROSILAN THERM
Other means of identification:
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Decorative paint
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
Colorificio Giovanazzi srl
Loc. S. Cecilia n. 18
38061 Ala - Trento - Italia
Phone.: 0464 696646
infotec@colorificiogiovanazzi.it
- 1.4 Emergency telephone number:**

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) No 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Warning
-
- Hazard statements:**
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.
- Precautionary statements:**
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P501: Dispose of contents/container according to the separated collection system used in your municipality.
- Supplementary information:**
Contains octhlinone (ISO), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1).
UFI: MF10-J04V-W00E-W67J
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

- 3.1 Substance:**
Non-applicable
- 3.2 Mixture:**
Chemical description: Aqueous mixture composed of additives, aggregates and resins

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

Safety data sheet

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MUROSILAN THERM



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS ** (continued)

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

| Identification | Chemical name/Classification | Concentration |
|--|--|---------------|
| CAS: 52-51-7 EC: 200-143-0 Index: 603-085-00-8 REACH: 01-2119980938-15-XXXX | bronopol (INN)⁽¹⁾ ATP ATP01 Regulation 1272/2008 Acute Tox. 4: H302+H312; Aquatic Acute 1: H400; Eye Dam. 1: H318; Skin Irrit. 2: H315; STOT SE 3: H335 - Danger | <1 % |
| CAS: 330-54-1 EC: 206-354-4 Index: 006-015-00-9 REACH: 01-2119517622-45-XXXX | diuron (ISO)⁽¹⁾ ATP ATP01 Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Carc. 2: H351; STOT RE 2: H373 - Warning | <1 % |
| CAS: 13463-41-7 EC: 236-671-3 Index: 613-333-00-7 REACH: 01-2119511196-46-XXXX | Pyrithione zinc⁽¹⁾ ATP ATP15 Regulation 1272/2008 Acute Tox. 2: H330; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Repr. 1B: H360D; STOT RE 1: H372 - Danger | <1 % |
| CAS: 107-21-1 EC: 203-473-3 Index: 603-027-00-1 REACH: 01-2119456816-28-XXXX | Ethanediol⁽²⁾ ATP CLP00 Regulation 1272/2008 Acute Tox. 4: H302 - Warning | <1 % |
| CAS: 26530-20-1 EC: 247-761-7 Index: 613-112-00-5 REACH: 01-2120768921-45-XXXX | octhilinone (ISO)⁽¹⁾ ATP ATP15 Regulation 1272/2008 Acute Tox. 2: H330; Acute Tox. 3: H301+H311; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1: H314; Skin Sens. 1A: H317; EUH071 - Danger | <1 % |
| CAS: 3811-73-2 EC: 223-296-5 Index: Non-applicable REACH: 01-2119493385-28-XXXX | Pyridine-2-thiol 1-oxide, sodium salt⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 3: H311; Acute Tox. 4: H302+H332; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Danger | <1 % |
| CAS: 55965-84-9 EC: Non-applicable Index: 613-167-00-5 REACH: Non-applicable | reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)⁽¹⁾ Self-classified Regulation 1272/2008 Acute Tox. 3: H301+H311+H331; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1B: H314; Skin Sens. 1A: H317 - Danger | <1 % |
| CAS: 141-32-2 EC: 205-480-7 Index: 607-062-00-3 REACH: 01-2119453155-43-XXXX | n-butyl acrylate⁽²⁾ ATP CLP00 Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Warning | <1 % |
| CAS: 80-62-6 EC: 201-297-1 Index: 607-035-00-6 REACH: 01-2119452498-28-XXXX | Methyl methacrylate⁽²⁾ ATP CLP00 Regulation 1272/2008 Flam. Liq. 2: H225; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Danger | <1 % |

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

⁽²⁾ Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

** Changes with regards to the previous version

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety data Sheet

By eye contact:

- CONTINUED ON NEXT PAGE -

MUROSILAN THERM



SECTION 4: FIRST AID MEASURES (continued)

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

- CONTINUED ON NEXT PAGE -

Safety data sheet

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MUROSILAN THERM



SECTION 7: HANDLING AND STORAGE (continued)

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C
 Maximum Temp.: 30 °C
 Maximum time: 6 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

| Identification | Occupational exposure limits | | |
|---|------------------------------|---------|-----------------------|
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | IOELV (8h) | 20 ppm | 52 mg/m ³ |
| | IOELV (STEL) | 40 ppm | 104 mg/m ³ |
| n-butyl acrylate CAS: 141-32-2 EC: 205-480-7 | IOELV (8h) | 2 ppm | 11 mg/m ³ |
| | IOELV (STEL) | 10 ppm | 53 mg/m ³ |
| Methyl methacrylate CAS: 80-62-6 EC: 201-297-1 | IOELV (8h) | 50 ppm | |
| | IOELV (STEL) | 100 ppm | |

DNEL (Workers):

| Identification | | Short exposure | | Long exposure | |
|--|------------|----------------|----------------|------------------------|-----------------------|
| | | Systemic | Local | Systemic | Local |
| bronopol (INN) CAS: 52-51-7 EC: 200-143-0 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 2 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 3,5 mg/m ³ | 2,5 mg/m ³ |
| diuron (ISO) CAS: 330-54-1 EC: 206-354-4 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 5,79 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 0,17 mg/m ³ | Non-applicable |
| Pyrrithione zinc CAS: 13463-41-7 EC: 236-671-3 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 0,01 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | Non-applicable | Non-applicable |

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

MUROSILAN THERM



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Identification | | Short exposure | | Long exposure | |
|--|------------|----------------|-----------------------|-------------------------|-----------------------|
| | | Systemic | Local | Systemic | Local |
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 106 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | Non-applicable | 35 mg/m ³ |
| n-butyl acrylate CAS: 141-32-2 EC: 205-480-7 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | Non-applicable | 11 mg/m ³ |
| Methyl methacrylate CAS: 80-62-6 EC: 201-297-1 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 13,67 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | 416 mg/m ³ | 348,4 mg/m ³ | 208 mg/m ³ |

DNEL (General population):

| Identification | | Short exposure | | Long exposure | |
|--|------------|----------------|-----------------------|------------------------|-----------------------|
| | | Systemic | Local | Systemic | Local |
| bronopol (INN) CAS: 52-51-7 EC: 200-143-0 | Oral | 0,5 mg/kg | Non-applicable | 0,18 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 0,7 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | 0,6 mg/m ³ | Non-applicable |
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | Oral | Non-applicable | Non-applicable | Non-applicable | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 53 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | Non-applicable | Non-applicable | 7 mg/m ³ |
| Methyl methacrylate CAS: 80-62-6 EC: 201-297-1 | Oral | Non-applicable | Non-applicable | 8,2 mg/kg | Non-applicable |
| | Dermal | Non-applicable | Non-applicable | 8,2 mg/kg | Non-applicable |
| | Inhalation | Non-applicable | 208 mg/m ³ | 74,3 mg/m ³ | 104 mg/m ³ |

PNEC:

| Identification | | | | |
|---|--------------|----------------|-------------------------|---------------|
| bronopol (INN) CAS: 52-51-7 EC: 200-143-0 | STP | 0,43 mg/L | Fresh water | 0,01 mg/L |
| | Soil | 0,5 mg/kg | Marine water | 0,001 mg/L |
| | Intermittent | 0,003 mg/L | Sediment (Fresh water) | 0,041 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,003 mg/kg |
| diuron (ISO) CAS: 330-54-1 EC: 206-354-4 | STP | 58 mg/L | Fresh water | 0,00032 mg/L |
| | Soil | 0,012 mg/kg | Marine water | 0,000032 mg/L |
| | Intermittent | 0,00022 mg/L | Sediment (Fresh water) | 0,052 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,005 mg/kg |
| Pyrithione zinc CAS: 13463-41-7 EC: 236-671-3 | STP | 0,01 mg/L | Fresh water | 0,00009 mg/L |
| | Soil | 1,02 mg/kg | Marine water | 0,00009 mg/L |
| | Intermittent | Non-applicable | Sediment (Fresh water) | 0,009 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,009 mg/kg |
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | STP | 199,5 mg/L | Fresh water | 10 mg/L |
| | Soil | 1,53 mg/kg | Marine water | 1 mg/L |
| | Intermittent | 10 mg/L | Sediment (Fresh water) | 37 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 3,7 mg/kg |
| octhilinone (ISO) CAS: 26530-20-1 EC: 247-761-7 | STP | Non-applicable | Fresh water | 0,0022 mg/L |
| | Soil | 0,0082 mg/kg | Marine water | 0,00022 mg/L |
| | Intermittent | 0,00122 mg/L | Sediment (Fresh water) | 0,0475 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,00475 mg/kg |
| n-butyl acrylate CAS: 141-32-2 EC: 205-480-7 | STP | 3,5 mg/L | Fresh water | 0,003 mg/L |
| | Soil | 1 mg/kg | Marine water | 0 mg/L |
| | Intermittent | 0,011 mg/L | Sediment (Fresh water) | 0,034 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,003 mg/kg |
| Methyl methacrylate CAS: 80-62-6 EC: 201-297-1 | STP | 10 mg/L | Fresh water | 0,94 mg/L |
| | Soil | 1,48 mg/kg | Marine water | 0,094 mg/L |
| | Intermittent | 0,94 mg/L | Sediment (Fresh water) | 10,2 mg/kg |
| | Oral | Non-applicable | Sediment (Marine water) | 0,102 mg/kg |

- CONTINUED ON NEXT PAGE -

MUROSILAN THERM





SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

8.2 Exposure controls:



A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection



| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|---|-----------------------------------|---|---------------------|--|
|  Mandatory respiratory tract protection | Filter mask for gases and vapours |  | EN 405:2002+A1:2010 | Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. |

C.- Specific protection for the hands



| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---------------------------------------|---|--------------|--|
|  Mandatory hand protection | Protective gloves against minor risks |  | | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018 |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



D.- Ocular and facial protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|--|---|---|---------------------------------|---|
|  Mandatory face protection | Panoramic glasses against splash/projections. |  | EN 166:2002 EN ISO 4007:2018 | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

E.- Body protection

| Pictogram | PPE | Labelling | CEN Standard | Remarks |
|-----------|----------------------|---|-------------------|---|
| | Work clothing |  | | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994. |
| | Anti-slip work shoes |  | EN ISO 20347:2012 | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007 |

F.- Additional emergency measures

| Emergency measure | Standards | Emergency measure | Standards |
|---|---|--|--|
|  Emergency shower | ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011 |  Eyewash stations | DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011 |

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

- V.O.C. (Supply): 0 % weight
- V.O.C. density at 20 °C: 0 kg/m³ (0 g/L)

- CONTINUED ON NEXT PAGE -



MUROSILAN THERM

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| | |
|---------------------------|--------------|
| Average carbon number: | 5,6 |
| Average molecular weight: | 114,36 g/mol |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

| | |
|--------------------------|--|
| Physical state at 20 °C: | Liquid |
| Appearance: | Paste |
| Colour: | According to the markings on the package |
| Odour: | Not available |
| Odour threshold: | Non-applicable * |

Volatility:

| | |
|--|-------------------------|
| Boiling point at atmospheric pressure: | 100 °C |
| Vapour pressure at 20 °C: | 2350 Pa |
| Vapour pressure at 50 °C: | 12379,68 Pa (12,38 kPa) |
| Evaporation rate at 20 °C: | Non-applicable * |

Product description:

| | |
|--|--------------------------|
| Density at 20 °C: | 1643,4 kg/m ³ |
| Relative density at 20 °C: | 1,643 |
| Dynamic viscosity at 20 °C: | Non-applicable * |
| Kinematic viscosity at 20 °C: | Non-applicable * |
| Kinematic viscosity at 40 °C: | >20,5 cSt |
| Concentration: | Non-applicable * |
| pH: | ca. 8 |
| Vapour density at 20 °C: | Non-applicable * |
| Partition coefficient n-octanol/water 20 °C: | Non-applicable * |
| Solubility in water at 20 °C: | |
| Solubility properties: | Non-applicable * |
| Decomposition temperature: | Non-applicable * |
| Melting point/freezing point: | Non-applicable * |
| Explosive properties: | Non-applicable * |
| Oxidising properties: | Non-applicable * |

Flammability:

| | |
|----------------------------|------------------------|
| Flash Point: | Non Flammable (>60 °C) |
| Heat of combustion: | Non-applicable * |
| Flammability (solid, gas): | Non-applicable * |
| Autoignition temperature: | 292 °C |
| Lower flammability limit: | Non-applicable * |
| Upper flammability limit: | Non-applicable * |

Explosive:

| | |
|------------------------|------------------|
| Lower explosive limit: | Non-applicable * |
| Upper explosive limit: | Non-applicable * |

9.2 Other information:

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

Safety data sheet

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MUROSILAN THERM



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Surface tension at 20 °C: Non-applicable *
 Refraction index: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight | Humidity |
|--------------------|------------------|-------------------------|------------|----------------|
| Not applicable | Not applicable | Precaution | Precaution | Not applicable |

10.5 Incompatible materials:

| Acids | Water | Oxidising materials | Combustible materials | Others |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Avoid direct impact | Not applicable | Avoid alkalis or strong bases |

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION **

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

MUROSILAN THERM



SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

- Carcinogenicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with carcinogenic effects. For more information see section 3.
IARC: n-butyl acrylate (3); Methyl methacrylate (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

| Identification | Acute toxicity | | Genus |
|--|-----------------|-----------------|--------|
| bronopol (INN) CAS: 52-51-7 EC: 200-143-0 | LD50 oral | 500 mg/kg | Rat |
| | LD50 dermal | 1600 mg/kg | Rabbit |
| | LC50 inhalation | Non-applicable | |
| diuron (ISO) CAS: 330-54-1 EC: 206-354-4 | LD50 oral | 1017 mg/kg | Rat |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |
| Pyrithione zinc CAS: 13463-41-7 EC: 236-671-3 | LD50 oral | 221 mg/kg | Rat |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | 0,14 mg/L (4 h) | Rat |
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | LD50 oral | 500 mg/kg | Rat |
| | LD50 dermal | 9530 mg/kg | Rabbit |
| | LC50 inhalation | Non-applicable | |
| oethilnone (ISO) CAS: 26530-20-1 EC: 247-761-7 | LD50 oral | 125 mg/kg | |
| | LD50 dermal | 311 mg/kg | |
| | LC50 inhalation | Non-applicable | |
| Pyridine-2-thiol 1-oxide, sodium salt CAS: 3811-73-2 EC: 223-296-5 | LD50 oral | 1500 mg/kg | Rat |
| | LD50 dermal | 1800 mg/kg | Rabbit |
| | LC50 inhalation | Non-applicable | |
| reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Non-applicable | LD50 oral | 100 mg/kg | Rat |
| | LD50 dermal | 300 mg/kg | Rat |
| | LC50 inhalation | Non-applicable | |
| n-butyl acrylate CAS: 141-32-2 EC: 205-480-7 | LD50 oral | 4000 mg/kg | |
| | LD50 dermal | Non-applicable | |
| | LC50 inhalation | Non-applicable | |

** Changes with regards to the previous version

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

MUROSILAN THERM



SECTION 12: ECOLOGICAL INFORMATION **

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

| Identification | Acute toxicity | | Species | Genus |
|--|----------------|----------------------|---------------------------|------------|
| bronopol (INN) CAS: 52-51-7 EC: 200-143-0 | LC50 | >0.1 - 1 mg/L (96 h) | | Fish |
| | EC50 | >0.1 - 1 mg/L (48 h) | | Crustacean |
| | EC50 | >0.1 - 1 mg/L (72 h) | | Algae |
| diuron (ISO) CAS: 330-54-1 EC: 206-354-4 | LC50 | 6.6 mg/L (96 h) | Leuciscus idus | Fish |
| | EC50 | 1.4 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | 0.022 mg/L (96 h) | Scenedesmus subspicatus | Algae |
| Pyrithione zinc CAS: 13463-41-7 EC: 236-671-3 | LC50 | 0.003 mg/L (96 h) | Pimephales promelas | Fish |
| | EC50 | 0.008 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | Non-applicable | | |
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | LC50 | 53000 mg/L (96 h) | Pimephales promelas | Fish |
| | EC50 | 51000 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | 24000 mg/L (168 h) | Selenastrum capricornutum | Algae |
| octhilinone (ISO) CAS: 26530-20-1 EC: 247-761-7 | LC50 | >0.1 - 1 mg/L (96 h) | | Fish |
| | EC50 | >0.1 - 1 mg/L (48 h) | | Crustacean |
| | EC50 | >0.1 - 1 mg/L (72 h) | | Algae |
| Pyridine-2-thiol 1-oxide, sodium salt CAS: 3811-73-2 EC: 223-296-5 | LC50 | 0.0073 mg/L (96 h) | Oncorhynchus mykiss | Fish |
| | EC50 | 0.022 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | Non-applicable | | |
| reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9 EC: Non-applicable | LC50 | >0.1 - 1 mg/L (96 h) | | Fish |
| | EC50 | >0.1 - 1 mg/L (48 h) | | Crustacean |
| | EC50 | >0.1 - 1 mg/L (72 h) | | Algae |
| n-butyl acrylate CAS: 141-32-2 EC: 205-480-7 | LC50 | 5.2 mg/L (96 h) | Salmo gairdneri | Fish |
| | EC50 | 230 mg/L (24 h) | Daphnia magna | Crustacean |
| | EC50 | 5.5 mg/L (96 h) | Selenastrum capricornutum | Algae |
| Methyl methacrylate CAS: 80-62-6 EC: 201-297-1 | LC50 | 191 mg/L (96 h) | Lepomis macrochirus | Fish |
| | EC50 | 69 mg/L (48 h) | Daphnia magna | Crustacean |
| | EC50 | 170 mg/L (96 h) | Selenastrum capricornutum | Algae |

12.2 Persistence and degradability:

| Identification | Degradability | | Biodegradability | |
|--|---------------|----------------|------------------|----------|
| | | | | |
| bronopol (INN) CAS: 52-51-7 EC: 200-143-0 | BOD5 | Non-applicable | Concentration | 100 mg/L |
| | COD | Non-applicable | Period | 28 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 0 % |
| diuron (ISO) CAS: 330-54-1 EC: 206-354-4 | BOD5 | Non-applicable | Concentration | 100 mg/L |
| | COD | Non-applicable | Period | 28 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 0 % |
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | BOD5 | 0,47 g O2/g | Concentration | 100 mg/L |
| | COD | 1,29 g O2/g | Period | 14 days |
| | BOD5/COD | 0,36 | % Biodegradable | 90 % |
| n-butyl acrylate CAS: 141-32-2 EC: 205-480-7 | BOD5 | Non-applicable | Concentration | 100 mg/L |
| | COD | Non-applicable | Period | 14 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 61,3 % |
| Methyl methacrylate CAS: 80-62-6 EC: 201-297-1 | BOD5 | Non-applicable | Concentration | 100 mg/L |
| | COD | Non-applicable | Period | 14 days |
| | BOD5/COD | Non-applicable | % Biodegradable | 94,3 % |

12.3 Bioaccumulative potential:

| Identification | Bioaccumulation potential | |
|---|---------------------------|-------|
| bronopol (INN) CAS: 52-51-7 EC: 200-143-0 | BCF | 0.6 |
| | Pow Log | -0.64 |
| | Potential | Low |

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

MUROSILAN THERM



SECTION 12: ECOLOGICAL INFORMATION ** (continued)

| Identification | Bioaccumulation potential | |
|--|---------------------------|----------|
| diuron (ISO) CAS: 330-54-1 EC: 206-354-4 | BCF | 64 |
| | Pow Log | 2.68 |
| | Potential | Moderate |
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | BCF | 10 |
| | Pow Log | -1.36 |
| | Potential | Low |
| n-butyl acrylate CAS: 141-32-2 EC: 205-480-7 | BCF | 37 |
| | Pow Log | 2.36 |
| | Potential | Moderate |
| Methyl methacrylate CAS: 80-62-6 EC: 201-297-1 | BCF | 7 |
| | Pow Log | 1.38 |
| | Potential | Low |

12.4 Mobility in soil:

| Identification | Absorption/desorption | | Volatility | |
|--|-----------------------|----------------------|------------|---------------------------------|
| Ethanediol CAS: 107-21-1 EC: 203-473-3 | Koc | 0 | Henry | 1,327E-1 Pa·m ³ /mol |
| | Conclusion | Very High | Dry soil | No |
| | Surface tension | 4,989E-2 N/m (25 °C) | Moist soil | No |
| n-butyl acrylate CAS: 141-32-2 EC: 205-480-7 | Koc | Non-applicable | Henry | Non-applicable |
| | Conclusion | Non-applicable | Dry soil | Non-applicable |
| | Surface tension | 2,598E-2 N/m (25 °C) | Moist soil | Non-applicable |
| Methyl methacrylate CAS: 80-62-6 EC: 201-297-1 | Koc | Non-applicable | Henry | Non-applicable |
| | Conclusion | Non-applicable | Dry soil | Non-applicable |
| | Surface tension | 2,551E-2 N/m (25 °C) | Moist soil | Non-applicable |

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

** Changes with regards to the previous version

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

| Code | Description | Waste class (Regulation (EU) No 1357/2014) |
|-----------|---|--|
| 08 01 11* | waste paint and varnish containing organic solvents or other hazardous substances | Dangerous |

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

- CONTINUED ON NEXT PAGE -



MUROSILAN THERM

SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains bronopol (INN), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1,2-benzisothiazol-3(2H)-one, 2,2'-dithiobis[N-methylbenzamide], diuron (ISO), Pyrithione zinc, octhilinone (ISO), 1,2-benzisothiazol-3(2H)-one, 2-methyl-2H-isothiazol-3-one, Pyridine-2-thiol 1-oxide, sodium salt, 1,2-benzisothiazol-3(2H)-one.

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: bronopol (INN) (Product-type 2, 6, 11, 12, 22) ; diuron (ISO) (Product-type 7, 10) ; Pyrithione zinc (Product-type 2, 6, 7, 9, 10, 21) ; octhilinone (ISO) (Product-type 6, 7, 8, 9, 10, 11, 13) ; Pyridine-2-thiol 1-oxide, sodium salt (Product-type 2, 6, 7, 9, 10, 13) ; reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (Product-type 2, 4, 6, 11, 12, 13)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances
- diuron (ISO) (330-54-1)

Texts of the legislative phrases mentioned in section 2:

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:



MUROSILAN THERM

SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 2: H330 - Fatal if inhaled.
 Acute Tox. 3: H301 - Toxic if swallowed.
 Acute Tox. 3: H301+H311 - Toxic if swallowed or in contact with skin.
 Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
 Acute Tox. 3: H311 - Toxic in contact with skin.
 Acute Tox. 4: H302 - Harmful if swallowed.
 Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin.
 Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.
 Aquatic Acute 1: H400 - Very toxic to aquatic life.
 Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
 Carc. 2: H351 - Suspected of causing cancer.
 Eye Dam. 1: H318 - Causes serious eye damage.
 Eye Irrit. 2: H319 - Causes serious eye irritation.
 Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
 Flam. Liq. 3: H226 - Flammable liquid and vapour.
 Repr. 1B: H360D - May damage the unborn child.
 Skin Corr. 1: H314 - Causes severe skin burns and eye damage.
 Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
 Skin Irrit. 2: H315 - Causes skin irritation.
 Skin Sens. 1: H317 - May cause an allergic skin reaction.
 Skin Sens. 1A: H317 - May cause an allergic skin reaction.
 STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure.
 STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.
 STOT SE 3: H335 - May cause respiratory irritation.

Classification procedure:

Skin Sens. 1A: Calculation method
 Aquatic Chronic 3: Calculation method

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
 IMDG: International maritime dangerous goods code
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organisation
 COD: Chemical Oxygen Demand
 BOD5: 5-day biochemical oxygen demand
 BCF: Bioconcentration factor
 LD50: Lethal Dose 50
 LC50: Lethal Concentration 50
 EC50: Effective concentration 50
 Log-POW: Octanol-water partition coefficient
 Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -