

# SAFETY DATA SHEET



OPAL 20 - All variants

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

### 1.1 Product identifier

Product name :  OPAL 20 - All variants

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

Product use : Lacquers.

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

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person responsible for this SDS : Prod-safe@teknos.com

#### National contact

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

Telephone number : National Poisons Information Centre: 01 809 2566

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Product definition : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

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

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

#### Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains adipohydrazide, 1,2-benzisothiazol-3(2H)-one, 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) and 2-Methyl-1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

Safety data sheet available on request. Contains biocidal products for in-can preservation: BIT and Bronopol and DTBMA and C(M)IT/MIT (3:1) and MBIT.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles :

## SECTION 2: Hazards identification

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture contains substances that are assessed to be a PBT or a vPvB, refer to Section 3.2.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

| Product/ingredient name                                                                                                               | Identifiers                                                     | %       | Classification                                                                                                                                                                                                                                          | Specific Conc. Limits, M-factors and ATEs                                                                                                                                                                                                                                   | Type |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| adipohydrazide                                                                                                                        | REACH #:<br>01-2119962900-36<br>EC: 213-999-5<br>CAS: 1071-93-8 | ≤0.3    | Skin Sens. 1, H317<br>Aquatic Chronic 2,<br>H411                                                                                                                                                                                                        | -                                                                                                                                                                                                                                                                           | [1]  |
| bumetrizole                                                                                                                           | EC: 223-445-4<br>CAS: 3896-11-5                                 | ≤0.3    | Not classified.                                                                                                                                                                                                                                         | -                                                                                                                                                                                                                                                                           | [2]  |
| 1,2-benzisothiazol-3(2H)-one                                                                                                          | EC: 220-120-9<br>CAS: 2634-33-5<br>Index: 613-088-00-6          | <0.05   | Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1, H317<br>Aquatic Acute 1, H400                                                                                                                                            | ATE [Oral] = 1020 mg/kg<br>Skin Sens. 1, H317:<br>C ≥ 0.05%<br>M [Acute] = 1                                                                                                                                                                                                | [1]  |
| 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<br>Index: 613-167-00-5                          | <0.0015 | Acute Tox. 3, H301<br>Acute Tox. 2, H310<br>Acute Tox. 2, H330<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410<br>EUH071                                                          | ATE [Oral] = 53 mg/kg<br>ATE [Dermal] = 50 mg/kg<br>ATE [Inhalation (vapours)] = 0.5 mg/l<br>Skin Corr. 1C, H314: C ≥ 0.6%<br>Eye Dam. 1, H318: C ≥ 0.6%<br>Eye Irrit. 2, H319: 0.06% ≤ C < 0.6%<br>Skin Sens. 1, H317: C ≥ 0.0015%<br>M [Acute] = 100<br>M [Chronic] = 100 | [1]  |
| 2-Methyl-1,2-benzisothiazol-3(2H)-one                                                                                                 | CAS: 2527-66-4<br>Index: 613-336-00-3                           | <0.0015 | Acute Tox. 3, H301<br>Acute Tox. 4, H312<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 2, H411<br>EUH071<br><b>See Section 16 for the full text of the H statements declared above.</b> | ATE [Oral] = 175 mg/kg<br>ATE [Dermal] = 1100 mg/kg<br>Skin Sens. 1, H317: C ≥ 0.0015%<br>M [Acute] = 1                                                                                                                                                                     | [1]  |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

## SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard

[2] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

## SECTION 5: Firefighting measures

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

### 7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

| Product/ingredient name        | Exposure limit values |
|--------------------------------|-----------------------|
| No exposure limit value known. |                       |

#### Biological exposure indices

| Product/ingredient name    | Exposure indices |
|----------------------------|------------------|
| No exposure indices known. |                  |

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

| Product/ingredient name                                                                                                               | Type | Exposure              | Value                  | Population         | Effects  |
|---------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------|------------------------|--------------------|----------|
| adipohydrazide                                                                                                                        | DNEL | Long term Inhalation  | 17.5 mg/m <sup>3</sup> | Workers            | Systemic |
| 1,2-benzisothiazol-3(2H)-one                                                                                                          | DNEL | Long term Dermal      | 0.345 mg/kg bw/day     | General population | Systemic |
|                                                                                                                                       | DNEL | Long term Dermal      | 0.966 mg/kg bw/day     | Workers            | Systemic |
|                                                                                                                                       | DNEL | Long term Inhalation  | 1.2 mg/m <sup>3</sup>  | General population | Systemic |
|                                                                                                                                       | DNEL | Long term Inhalation  | 6.81 mg/m <sup>3</sup> | Workers            | Systemic |
| 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) | DNEL | Long term Inhalation  | 0.02 mg/m <sup>3</sup> | General population | Local    |
|                                                                                                                                       | DNEL | Long term Inhalation  | 0.02 mg/m <sup>3</sup> | Workers            | Local    |
|                                                                                                                                       | DNEL | Short term Inhalation | 0.04 mg/m <sup>3</sup> | General population | Local    |
|                                                                                                                                       | DNEL | Short term Inhalation | 0.04 mg/m <sup>3</sup> | Workers            | Local    |
|                                                                                                                                       | DNEL | Long term Oral        | 0.09 mg/kg bw/day      | General population | Systemic |
|                                                                                                                                       | DNEL | Short term Oral       | 0.11 mg/kg bw/day      | General population | Systemic |

#### PNECs

No PNECs available

### 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### Individual protection measures

## SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.  
Recommendations : Wear suitable gloves tested to EN374.  
> 8 hours (breakthrough time): Nitrile gloves. thickness > 0.3 mm  
Not recommended polyvinyl alcohol (PVA) gloves
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.  
Filter type (spray application): A P
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid.
- Colour** : Various
- Odour** : Slight
- Odour threshold** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** :

| Ingredient name | °C  | °F    | Method |
|-----------------|-----|-------|--------|
| Water           | 100 | 212   |        |
| Ethyldiglycol   | 196 | 384.8 |        |

- Flammability** : Not available.
- Lower and upper explosion limit** : Lower: 1.2%  
Upper: 23.5%
- Flash point** : Closed cup: >100°C (>212°F)
- Auto-ignition temperature** :

| Ingredient name | °C  | °F    | Method |
|-----------------|-----|-------|--------|
| Ethyldiglycol   | 204 | 399.2 |        |

## SECTION 9: Physical and chemical properties

|                                                |                                    |
|------------------------------------------------|------------------------------------|
| <b>Decomposition temperature</b>               | : Not available.                   |
| <b>pH</b>                                      | : 7.5 to 8.5 [Conc. (% w/w): 100%] |
| <b>Viscosity</b>                               | : Not available.                   |
| <b>Solubility(ies)</b>                         | :                                  |
| Not available.                                 |                                    |
| <b>Solubility in water</b>                     | : Not available.                   |
| <b>Partition coefficient: n-octanol/ water</b> | : Not applicable.                  |
| <b>Vapour pressure</b>                         | :                                  |

| Ingredient name | Vapour Pressure at 20°C |       |        | Vapour pressure at 50°C |     |        |
|-----------------|-------------------------|-------|--------|-------------------------|-----|--------|
|                 | mm Hg                   | kPa   | Method | mm Hg                   | kPa | Method |
| Water           | 17.5                    | 2.3   |        |                         |     |        |
| Ethylidiglycol  | 0.14                    | 0.019 |        |                         |     |        |

|                                 |                         |
|---------------------------------|-------------------------|
| <b>Relative density</b>         | : Not available.        |
| <b>Density</b>                  | : 1.1 g/cm <sup>3</sup> |
| <b>Vapour density</b>           | : Not available.        |
| <b>Explosive properties</b>     | : Not available.        |
| <b>Oxidising properties</b>     | : Not available.        |
| <b>Particle characteristics</b> |                         |
| <b>Median particle size</b>     | : Not applicable.       |

## SECTION 10: Stability and reactivity

|                                                |                                                                                                        |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>10.1 Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.           |
| <b>10.2 Chemical stability</b>                 | : The product is stable.                                                                               |
| <b>10.3 Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| <b>10.4 Conditions to avoid</b>                | : No specific data.                                                                                    |
| <b>10.5 Incompatible materials</b>             | : No specific data.                                                                                    |
| <b>10.6 Hazardous decomposition products</b>   | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

| Product/ingredient name                                                                                                                                             | Result    | Species | Dose       | Exposure |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|------------|----------|
| 2-benzisothiazol-3(2H)-one<br>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) | LD50 Oral | Rat     | 1020 mg/kg | -        |
|                                                                                                                                                                     | LD50 Oral | Rat     | 53 mg/kg   | -        |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### Acute toxicity estimates



## SECTION 11: Toxicological information

| Route          | ATE value |
|----------------|-----------|
| Not available. |           |

### Irritation/Corrosion

| Product/ingredient name                                                                                                                                          | Result                 | Species | Score | Exposure     | Observation |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------|-------|--------------|-------------|
| 2-benzisothiazol-3(2H)-one 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) | Skin - Mild irritant   | Human   | -     | 48 hours 5 % | -           |
|                                                                                                                                                                  | Skin - Severe irritant | Human   | -     | 0.01 %       | -           |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Sensitisation

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Mutagenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Reproductive toxicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Teratogenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure



## SECTION 11: Toxicological information

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

Not available.

### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name               | Result                            | Species                                                                       | Exposure |
|---------------------------------------|-----------------------------------|-------------------------------------------------------------------------------|----------|
| 2-Methyl-1,2-benzisothiazol-3(2H)-one | Acute EC50 0.36 mg/l Marine water | Algae - <i>Skeletonema Costatum</i>                                           | 72 hours |
|                                       | Acute EC50 3.7 mg/l               | Daphnia - <i>Daphnia Magna</i>                                                | 48 hours |
|                                       | Acute LC50 1.9 mg/l Fresh water   | Fish - <i>Onorhynchus Mykiss</i>                                              | 96 hours |
|                                       | Acute NOEC 0.15 mg/l Marine water | Algae - <i>Skeletonema Costatum</i>                                           | 72 hours |
|                                       | Acute EC50 0.22 ppm Fresh water   | Algae - <i>Pseudokirchneriella subcapitata</i>                                | 96 hours |
|                                       | Acute EC50 0.92 ppm Fresh water   | Daphnia - <i>Daphnia magna</i>                                                | 48 hours |
|                                       | Acute LC50 0.24 ppm Fresh water   | Fish - <i>Oncorhynchus mykiss</i> - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| Chronic NOEC 0.16 ppm                 | Fish - <i>Pimephales promelas</i> | 32 days                                                                       |          |

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### 12.2 Persistence and degradability

| Product/ingredient name    | Test | Result         | Dose | Inoculum |
|----------------------------|------|----------------|------|----------|
| 2-benzisothiazol-3(2H)-one | EU   | 24 % - 28 days | -    | -        |

**Conclusion/Summary** : This product has not been tested for biodegradation.

| Product/ingredient name    | Aquatic half-life | Photolysis | Biodegradability |
|----------------------------|-------------------|------------|------------------|
| 2-benzisothiazol-3(2H)-one | -                 | -          | Inherent         |

### 12.3 Bioaccumulative potential

| Product/ingredient name      | LogP <sub>ow</sub> | BCF        | Potential |
|------------------------------|--------------------|------------|-----------|
| bumetrizole                  | -                  | 548 to 895 | High      |
| 1,2-benzisothiazol-3(2H)-one | -                  | 3.2        | Low       |

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**Date of issue/Date of revision** : 15/02/2024 **Date of previous issue** : 21/02/2023 **Version** : 3 9/14

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**Label No** : 7501

## SECTION 12: Ecological information

| Product/ingredient name                                                                                                                                                                  | PBT | P   | B   | T  | vPvB                | vP        | vB        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|----|---------------------|-----------|-----------|
| adipohydrazide                                                                                                                                                                           | No  | N/A | N/A | No | N/A                 | N/A       | N/A       |
| bumetrizole                                                                                                                                                                              | No  | N/A | No  | No | SVHC<br>(Candidate) | Specified | Specified |
| 1,2-benzisothiazol-3(2H)-one<br>reaction mass of: 5-chloro-<br>2-methyl-4-isothiazolin-<br>3-one [EC no. 247-500-7]<br>and 2-methyl-2H-isothiazol-<br>3-one [EC no. 220-239-6] (3:<br>1) | No  | N/A | No  | No | No                  | N/A       | No        |
| 2-Methyl-1,2-benzisothiazol-<br>3(2H)-one                                                                                                                                                | No  | N/A | N/A | No | N/A                 | N/A       | N/A       |

### 12.6 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**European waste catalogue (EWC)** : 080112, 200128

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

|                                 | ADR/RID        | ADN            | IMDG           | IATA           |
|---------------------------------|----------------|----------------|----------------|----------------|
| 14.1 UN number or ID number     | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name    | -              | -              | -              | -              |
| 14.3 Transport hazard class(es) | -              | -              | -              | -              |
| 14.4 Packing group              | -              | -              | -              | -              |
| 14.5 Environmental hazards      | No.            | No.            | No.            | No.            |

## SECTION 14: Transport information

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not relevant/applicable due to nature of the product.

## SECTION 15: Regulatory information

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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

| Intrinsic property                      | Ingredient name | Status    | Reference number   | Date of revision |
|-----------------------------------------|-----------------|-----------|--------------------|------------------|
| <input checked="" type="checkbox"/> PVB | bumetrizole     | Candidate | D(2023)<br>8585-DC | -                |

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

**Labelling** :

**Other EU regulations**

**Industrial emissions** : Not listed

**(integrated pollution prevention and control) - Air**

**Industrial emissions** : Not listed

**(integrated pollution prevention and control) - Water**

**Explosive precursors** :  Not applicable.

**Ozone depleting substances (1005/2009/EU)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Seveso Directive**

This product is not controlled under the Seveso Directive.

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

## SECTION 15: Regulatory information

### [UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- SGG = Segregation Group
- vPvB = Very Persistent and Very Bioaccumulative

### [Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

Not classified.

### [Full text of abbreviated H statements](#)

|        |                                                       |
|--------|-------------------------------------------------------|
| H301   | Toxic if swallowed.                                   |
| H302   | Harmful if swallowed.                                 |
| H310   | Fatal in contact with skin.                           |
| H312   | Harmful in contact with skin.                         |
| H314   | Causes severe skin burns and eye damage.              |
| H315   | Causes skin irritation.                               |
| H317   | May cause an allergic skin reaction.                  |
| H318   | Causes serious eye damage.                            |
| H330   | Fatal if inhaled.                                     |
| H400   | Very toxic to aquatic life.                           |
| H410   | Very toxic to aquatic life with long lasting effects. |
| H411   | Toxic to aquatic life with long lasting effects.      |
| EUH071 | Corrosive to the respiratory tract.                   |

### [Full text of classifications \[CLP/GHS\]](#)

|                   |                                                 |
|-------------------|-------------------------------------------------|
| Acute Tox. 2      | ACUTE TOXICITY - Category 2                     |
| Acute Tox. 3      | ACUTE TOXICITY - Category 3                     |
| Acute Tox. 4      | ACUTE TOXICITY - Category 4                     |
| Aquatic Acute 1   | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1  |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Eye Dam. 1        | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1  |
| Skin Corr. 1C     | SKIN CORROSION/IRRITATION - Category 1C         |
| Skin Irrit. 2     | SKIN CORROSION/IRRITATION - Category 2          |
| Skin Sens. 1      | SKIN SENSITISATION - Category 1                 |
| Skin Sens. 1A     | SKIN SENSITISATION - Category 1A                |

**Date of issue/ Date of revision** : 15/02/2024

**Date of previous issue** : 21/02/2023

**Version** : 3

OPAL 20

All variants

### [Notice to reader](#)

## SECTION 16: Other information

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

