



# SAFETY DATA SHEET

BIORID SPRAY

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

### 1.1 Product identifier

Product name : BIORID SPRAY  
Product description : A waterborne functional paint.

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

Recommended use: Painting work

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

#### Manufacturer or Distributor

Tikkurila Oyj  
P.O. Box 53  
FI-01301 VANTAA  
FINLAND  
Telephone +358 20 191 2000

e-mail address of person responsible for this SDS : Tikkurila Oyj,  
Product Safety,  
e-mail: productsafety@tikkurila.com

### 1.4 Emergency telephone number

Telephone number : 112  
(24h)

#### Supplier or Manufacturer


Telephone number :  Tikkurila Oyj  
+358 20 191 2000 (GMT +2) Mon-Fri 8-16

## 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]


 Skin Sens. 1, H317  
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

### 2.2 Label elements

Hazard pictograms : 

Signal word :  Warning

Hazard statements :  H317 - May cause an allergic skin reaction.  
H412 - Harmful to aquatic life with long lasting effects.

#### Precautionary statements

General : Not applicable.

<b>Prevention</b>	:	P280 - Wear protective gloves. P284 - In case of inadequate ventilation wear respiratory protection. P273 - Avoid release to the environment.
<b>Response</b>	:	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
<b>Storage</b>	:	Not applicable.
<b>Disposal</b>	:	Not applicable.
<b>Hazardous ingredients</b>	:	1,2-benzisothiazol-3(2H)-one (BIT) 2-octyl-2H-isothiazol-3-one (OIT) reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (C(M)IT/MIT (3:1))
<b>Supplemental label elements</b>	:	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Contains small amounts of sensitizing substances: 1,2-benzisothiazol-3(2H)-one (BIT), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (C(M)IT/MIT (3:1)).

#### Treated articles

This product contains a biocidal product for the preservation of the product during storage. Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (C(M)IT/MIT (3:1)).

### 2.3 Other hazards

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 Regulation (EC) No. 1272/2008 [CLP]	Notes
3-Iodo-2-propynyl butylcarbamate (IPBC)	REACH #: 01-2120762115-60 EC: 259-627-5 CAS: 55406-53-6	<0.1	Acute Tox. 4, H302 Acute Tox. 3, H331 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372 (larynx) Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	-
1,2-benzisothiazol-3(2H)-one (BIT)	EC: 220-120-9 CAS: 2634-33-5	<0.05	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411	-
2-octyl-2H-isothiazol-3-one (OIT)	EC: 247-761-7 CAS: 26530-20-1 Index: 613-112-00-5	<0.025	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	-
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (C(M)IT/MIT (3:1))	CAS: 55965-84-9 Index: 613-167-00-5	<0.001	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071  <b>See Section 16 for the full text of the H statements declared above.</b>	-

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

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 or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

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

Notes, if applicable, refer to Notes given in Annex VI of 1272/2008/EC.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Show this safety data sheet or label to the doctor if possible.
- Eye contact** :  Check for and remove any contact lenses. Immediately flush eyes with plenty of lukewarm water, keeping eyelids open. Continue to rinse for at least 15 minutes. Get medical attention if symptoms occur.
- Inhalation** :  Remove to fresh air. Keep person warm and at rest.
- Skin contact** :  Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Get medical attention if symptoms occur.
- Ingestion** :  If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Remove to fresh air and keep at rest in a position comfortable for breathing. Do NOT induce vomiting.

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

May cause an allergic skin reaction.

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

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

None.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. Recommended: Alcohol resistant foam, CO<sub>2</sub>, powders or water spray/mist.
- Unsuitable extinguishing media** : Do not use a direct water jet that could spread the fire.

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

- Hazards from the substance or mixture** : This product is not classified as flammable. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous combustion products** : When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Use water spray to keep fire-exposed containers cool. This material is hazardous to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- 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.

## SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** : Provide adequate ventilation. Avoid breathing vapor or mist. Avoid direct skin contact with product. See Section 8 for information on appropriate personal protective equipment.
- 6.2 Environmental precautions** : Hazardous to aquatic environment. Do not allow to enter drains, water courses or soil.
- 6.3 Methods and materials for containment and cleaning up** : 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. Preferably clean with a detergent. Avoid using solvents.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

- 7.1 Precautions for safe handling** : Skin contact with the product and exposure to spray mist and vapor should be avoided. Avoid contact with skin and eyes. Avoid inhalation of dust from sanding. See Section 8 for information on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled and stored. Wash hands before breaks and immediately after handling the product. Avoid release to the environment.
- 7.2 Conditions for safe storage, including any incompatibilities** : Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Recommended storage temperature is +5°C ...+25°C. Store in accordance with local regulations.
- 7.3 Specific end use(s)** : None.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No exposure limit value known.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

#### DNELs/DMELs

No DNELs/DMELs available.

#### PNECs

No PNECs available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn (see Personal protection). Comply with the health and safety at work laws.

#### Individual protection measures

**Eye/face protection** : Use safety eyewear designed to protect against splash of liquids (EN166).

<b>Hand protection</b>	: Always wear approved protective gloves against chemicals. Gloves should be replaced regularly and if there is any sign of damage to the glove material. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Recommended glove material (EN374): > 8 hours (breakthrough time): nitrile rubber Not recommended: PVA gloves
<b>Skin protection</b>	: Wear suitable protective clothing.
<b>Respiratory protection</b>	: During spray-application use respirators with combination filter A/P3 (EN405:2001). Wear a half mask or full face respirator with gas and vapor filter A and dust filter P2 during sanding (EN140:1998, EN405:2001). During continuous and long-term work the use of motor-driven or air-fed respirators is recommended (EN12941:1998). Be sure to use an approved/certified respirator or equivalent. Check that mask fits tightly and change filter regularly.
<b>Environmental exposure controls</b>	: For information regarding environmental protection measures, please refer to section 13 for waste handling, section 7 for handling and storage and section 1.2 for relevant identified uses of the substance or mixture and uses advised against.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Liquid.
<b>Color</b>	: White.
<b>Odor</b>	: Mild.
<b>Odor threshold</b>	: Not relevant for the hazard assessment of the product.
<b>pH</b>	: Not relevant for the hazard assessment of the product.
<b>Melting point/freezing point</b>	: 0°C (water)
<b>Initial boiling point and boiling range</b>	: 100°C (water)
<b>Flash point</b>	: > 100 °C
<b>Evaporation rate</b>	: Not relevant due to the nature of the product.
<b>Flammability (solid, gas)</b>	: Not applicable. Product is a liquid.
<b>Upper/lower flammability or explosive limits</b>	: No flammable ingredients present.
<b>Vapor pressure</b>	: 3.2 kPa [room temperature] (water)
<b>Vapor density</b>	: Not relevant for the hazard assessment of the product.
<b>Density</b>	: 1.2 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	: Soluble in water.
<b>Partition coefficient: n-octanol/water</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: Not relevant due to the nature of the product.
<b>Decomposition temperature</b>	: Not relevant for the hazard assessment of the product.
<b>Viscosity</b>	: Not relevant for the hazard assessment of the product.
<b>Explosive properties</b>	: No explosive ingredients present.
<b>Oxidizing properties</b>	: No oxidizing ingredients present.

#### Particle characteristics

<b>Median particle size</b>	: Not applicable.
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### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

- 10.1 Reactivity** : See Section 10.5.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Avoid extreme heat and freezing.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions:  
oxidizing agents  
strong acids  
strong alkalis
- 10.6 Hazardous decomposition products** : When exposed to high temperatures, hazardous decomposition products may be produced, such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

There is no test data available on the product itself.

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Long term exposure to spray mist may produce respiratory tract irritation. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-octyl-2H-isothiazol-3-one (OIT)	LD50 Dermal	Rabbit	690 mg/kg	-
	LD50 Oral	Rat	550 mg/kg	-

Not classified.

#### Irritation/Corrosion

Not classified.

#### Sensitization

May cause an allergic skin reaction.

The product contains sensitizing substances mentioned in sections 2 and 3.

#### Mutagenicity

Not classified.

#### Carcinogenicity

Not classified.

#### Reproductive toxicity

Not classified.

#### Teratogenicity

Not classified.

#### Specific target organ toxicity (single exposure)

Not classified.

#### Specific target organ toxicity (repeated exposure)

Not classified.

#### Aspiration hazard

Not classified.

## SECTION 12: Ecological information

Ecological testing has not been conducted on this product.  
Do not allow to enter drains, water courses or soil.

The product is classified as environmentally hazardous according to Regulation (EC) 1272/2008.  
Harmful to aquatic life with long lasting effects.

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2-Iodo-2-propynyl butylcarbamate (IPBC)	EC50 0.053 mg/l	Algae	72 hours
	EC50 0.16 mg/l	Daphnia	48 hours
	LC50 0.067 mg/l	Fish	96 hours
	NOEC 0.05 mg/l	Daphnia - Daphnia magna	21 days
1,2-benzisothiazol-3(2H)-one (BIT)	Acute EC50 0.36 mg/l	Algae - Skeletonema costatum	72 hours
	Acute LC50 0.74 mg/l	Fish	96 hours
2-octyl-2H-isothiazol-3-one (OIT)	EC50 0.32 mg/l	Daphnia - Daphnia magna	48 hours
	LC50 0.047 mg/l	Fish - Oncorhynchus mykiss	96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (C(M) IT/MIT (3:1))	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	Bioconcentration factor [BCF]	Potential
2-Octyl-2H-isothiazol-3-one (OIT)	2.45	-	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

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : Not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : Gather residues into waste containers. Liquid residue and cleaning liquids are hazardous waste and must not be emptied into drains or sewage system, but handled in accordance with national regulations. Product residues should be left at special companies which have permission for gathering this kind of wastes.

#### European waste catalogue (EWC)

Waste code	Waste designation
08 01 12	waste paint and varnish other than those mentioned in 08 01 11

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

#### Packaging

**Methods of disposal** : Empty packaging should be recycled or disposed of in accordance with national regulations.

**Special precautions** : None.

## SECTION 14: Transport information

This product is not regulated for carriage according to ADR/RID, IMDG, IATA.

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

**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 Transport in bulk according to IMO instruments** : Not available.

## 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)

Other EU regulations

**Europe inventory** :  At least one component is not listed.

**Persistent Organic Pollutants**

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  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 vPvB = Very Persistent and Very Bioaccumulative

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

	<b>Classification</b>	<b>Justification</b>
<p> <input checked="" type="checkbox"/> Skin Sens. 1, H317  <input checked="" type="checkbox"/> Aquatic Chronic 3, H412         </p>		<p>           Calculation method            Calculation method         </p>
<b>Full text of abbreviated H statements</b>	: <input checked="" type="checkbox"/> H301 H302 H310 H311 H330 H331 H314 H318 H315 H317 H372 H400 H410 H411 H412 EUH071	<p>           Toxic if swallowed.            Harmful if swallowed.            Fatal in contact with skin.            Toxic in contact with skin.            Fatal if inhaled.            Toxic if inhaled.            Causes severe skin burns and eye damage.            Causes serious eye damage.            Causes skin irritation.            May cause an allergic skin reaction.            Causes damage to organs through prolonged or repeated exposure.            Very toxic to aquatic life.            Very toxic to aquatic life with long lasting effects.            Toxic to aquatic life with long lasting effects.            Harmful to aquatic life with long lasting effects.            Corrosive to the respiratory tract.         </p>
<b>Full text of classifications [CLP/GHS]</b>	: <input checked="" type="checkbox"/> Acute Tox. 2 Acute Tox. 3 Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Eye Dam. 1 Skin Corr. 1 Skin Corr. 1C Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1A STOT RE 1	<p>           ACUTE TOXICITY - Category 2            ACUTE TOXICITY - Category 3            ACUTE TOXICITY - Category 4            AQUATIC HAZARD (ACUTE) - Category 1            AQUATIC HAZARD (LONG-TERM) - Category 1            AQUATIC HAZARD (LONG-TERM) - Category 2            AQUATIC HAZARD (LONG-TERM) - Category 3            SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1            SKIN CORROSION/IRRITATION - Category 1            SKIN CORROSION/IRRITATION - Category 1C            SKIN CORROSION/IRRITATION - Category 2            SKIN SENSITIZATION - Category 1            SKIN SENSITIZATION - Category 1A            SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1         </p>
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<b>Version</b>	: 3	
<b>Notice to reader</b>		

This Safety Data Sheet is prepared in accordance with Annex II (EU) No 830/2015 to Regulation (EC) No 1907/2006 (REACH). The information contained in this Safety Data Sheet is based on the present state of knowledge and current EU and national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.