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

1.1. Product identifier
Trade name: **BIOPOLIN®**

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
Attractant for bees for use in agriculture and gardening

1.2.2. Uses advised against
None.

1.3. Details of the supplier of the safety data sheet
ICB Pharma Tomasz Świętosławski, Paweł Świętosławski Spółka Jawna
Address: Moździerzowców 6a, 43-602 Jaworzno, Poland
Phone: +48 32 745 47 00
e-mail: office@icbpharma.com
Person responsible for SDS: e-mail: sds@icbpharma.com

1.4. Emergency telephone number:
112 – emergency number
+48 32 745 47 00 (at working hours: 8.00 a.m. – 4 p.m.) – manufacturer number

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
According to the Regulation (EC) No 1272/2008:
Product is classified as hazardous:

Skin Sens. 1 H317 May cause an allergic skin reaction

Health hazard: skin sensitizer
Environmental Hazards: none
Physical/chemical hazards: none
Fire hazard: not flammable

2.2. Label elements
According to the Regulation (WE) 1272/2008:
Pictograms:


GHS07

Signal Word:
WARNING

Hazard statements:
H317 May cause an allergic skin reaction

Precautionary statement:
P261 Avoid breathing mist/vapours/spray
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

P362+P364 Take off contaminated clothing and wash it before reuse.

Hazardous components to be place on the label:
citral, 2-methoxy-4-(prop-2-en-1-yl)phenol.

2.3. Other hazards
Product does not met PBT or vPvB criteria according to XIII of REACH regulation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures.
Product is a mixture.

Hazardous ingredients content (ingredients contained in the mixture below general or specific concentration limits, not meeting PBT/vPvB criteria, not listed on the SVHC list and not having the Occupational Limit Values in work environment are not disclosed):

Name	Identifiers	Concentration [% w/w]	CLP Classification
citral*	CAS: 5392-40-5 WE: 226-394-6 Index No.: 605-019-00-3 REACH registration No.: 01-2119462829-23-xxxx	>2 - <5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens.1, H317
2-methoxy-4-(prop-2-en-1-yl)phenol	CAS: 97-53-0 WE: 202-589-1 Index No.: None REACH registration No.: 01-2119971802-33-xxxx WE: 220-120-9 Index No.: 613-088-00-6 REACH registration No.: Not aplicable	>2 - <4	Eye Irrit. 2, H319 Skin Sens.1, H317

The full text of H phrases is given in section 16.
* Substance for which there are Community workplace exposure limits

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures.
General recommendations:
Remove victim from exposed area, place in lateral position, provide fresh air and heat. Do not give anything by mouth to unconscious person.. If feeling unwell call for medical help. In case of contact with emergency phone number of manufacturer or medical services, get product labelled packaging or this safety data sheet.

Protection of personnel providing first aid:
Do not take any actions which may pose a threat for first-aiders unless fully aware of risks and sufficiently trained.

Contamination of the skin:
Remove contaminated clothing. Rinse skin thoroughly with plenty of water, then wash with soap, rinse again. In case of sensitization / irritation get medical attention. Wash contaminated clothing before reuse.

Contamination of the eyes:
Rinse with clean water or dedicated eye washing kit with wide open eye lids for at least 15 minutes. Remove contact lenses if present, continue rinsing. If persistent irritation occurs get medical attention.

Inhalation:
Remove victim from exposed area to fresh air, which in most cases should be sufficient. In case of feeling unwell get medical attention.

Ingestion:
Rinse mouth with water. Immediately after ingestion, to conscious person, give plenty of water to drink. Provoke vomiting only if told to do so by medical personnel. Do not provoke vomiting and give anything by mouth to unconscious person. Get medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Acute symptoms – temporary skin and eye irritation
Delayed symptoms – possible alergic reaction when particularly sensitive
Effects of exposure – no data

4.3. Indication of any immediate medical attention and special treatment needed
Note to Physician: no specific antidote is known. The decision on how to proceed is made by a doctor after a thorough assessment of the injured person's condition. Symptomatic treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media
Suitable extinguishing media:
CO_2, alcohols resisted foams, water mist; use media appropriate of fire surroundings

Unsuitable extinguishing media:
No specific guide. Get surrounding material into consideration for suitability of extinguishing media. A strong water jet is NOT RECOMMENDED – risk of fire spread and environment contamination.

5.2. Special hazards arising from the substance or mixture
During the fire of the product following compounds might be emitted – carbon oxides, silica oxides, formaldehyde, other hazardous gases. Avoid breathing of combustion products, they might be hazardous to health.

5.3. Advice for fire-fighters
Unconditionally use personal breathing apparatus and wear appropriate protective clothing during firefighting and cleaning after the fire inside closed and poorly ventilated rooms.

General: remove from the endangered area all unauthorized persons, not involved in extinguishing the fire, order evacuation if necessary. Dispose of all ignition sources. In the event of fire, cool the vessels and storage tanks. Do not allow extinguishing agents used to extinguish the fire to get into the watercourse.

Additional remarks: tanks and packaging not covered by fire, exposed to fire or high temperature cool with water, from a safe distance (risk of explosion), if possible remove them from the danger area. Dispose of fire residues and contaminated fire extinguishing water in accordance with applicable regulations. Do not allow extinguishing media used to extinguish fire and extinguishing water to get into sewage system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel:
Limit the access of bystanders to the contaminated area. In the event of large spills, isolate the affected area. Use personal protection equipment. Avoid eyes and skin contamination. Avoid direct contact with the released product. Ensure adequate ventilation.

For emergency responders:
Follow instructions, use appropriate personal protection measures.

6.2. Environmental precautions
If larger quantities of the product are released, steps should be taken to prevent spreading in the wild. Avoid entering drains, groundwater, soil and open water courses. In the event of significant quantities of product getting into waters, relevant services should be notified.

6.3. Methods and material for containment and cleaning up
If the container is unsealed, spills occur, secure the source of the leak, pour the product into an empty container. Spilled product should be treated with a suitable sorbent (sand, sawdust, diatomaceous earth, vermiculite, universal sorbent), collected in the described containers and handed over for disposal. Clean the contamination surface. Maintenance and cleaning work should be carried out with adequate ventilation.

6.4. Reference to other sections
Personal protective equipment – section 8
Waste disposal – section 13

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Use only as intended. Read the label before using the product. Work in accordance with the principles of health and safety. Wash hands before breaks and after finishing work. Use personal protection equipment. Avoid eyes and skin contamination. Ensure adequate ventilation. Do not consume. Maintain cleanliness and order when handling the product.

Specific measures against fire and explosion: no specific requirements.

Industrial hygiene:
- ensure good ventilation (overall and local exhausted ventilation)
- ensure place for eyes and skin rinsing
- wash hands with soap and water before eating, smoking and after work
- use general caution while working with chemical substances

7.2. Conditions for safe storage, including any incompatibilities.
Store in original, labelled and tightly closed containers in cold and well ventilated room. Protect against heat sources and direct sunlight. Recommended storage temperatures: 5 to 35 °C.
Keep away of children. Do not store with food, beverages, feeding stuff.

7.3. Specific end use(s)
No information about uses other than those mentioned in subsection 1.2.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters
Threshold exposure limits:
3,7-Dimetylookta-2,6-dienal (citral), CAS: 5392-40-5 has established TLV in following countries: (Italy, Mexico, Poland, Spain, USA). Checking national legislation for exact concentrations and methods of control of workspace is mandatory/.

DNELs (Derived No Effect Levels) available for mixture components:

Citral, CAS: 5392-40-5

Exposure route	WORKERS				GENERAL POPULATION			
	Systemic Effects		Local Effects		Systemic Effects		Local Effects	
	Long-term	Acute	Long-term	Acute	Long-term	Acute	Long-term	Acute
INHALATION	n. d.	n. d.	9 mg/m³	n. d.	n. d.	n. d.	2.7 mg/m³	n. d.
DERMAL	n. d.	n. d.	1.7 mg/kg	n. d.	n. d.	n. d.	1 mg/kg	n. d.

			bw/day				bw/day	
ORAL	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	600 µg/kg bw/day	n. d
EYE	n. d.				n. d.			

2-methoxy-4-(prop-2-en-1-yl)phenol, CAS: 97-53-0

Exposure route	**WORKERS**				**GENERAL POPULATION**			
	Systemic Effects		**Local Effects**		**Systemic Effects**		**Local Effects**	
	Long-term	**Acute**	**Long-term**	**Acute**	**Long-term**	**Acute**	**Long-term**	**Acute**
INHALATION	n. d.	n. d.	21.2 mg/m³	n. d.	n. d.	n. d.	5.22 mg/m³	n. d.
DERMAL	n. d.	n. d.	6 mg/kg bw/day	n. d.	n. d.	n. d.	3 mg/kg bw/day	n. d.
ORAL	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	3 mg/kg bw/day	n. d
EYE	n. d.				n. d.			

n. d. – no data

8.2. Exposure controls

Technical exposure controls:

Mechanical general ventilation is appropriate measure in normal temperature. Additional local ventilation might be required when concentration of vapours is elevated over safe thresholds.

Personal protection measures:

The necessity and appropriateness of personal protective equipment should be assessed on the basis of the hazard posed by the product and the conditions in which it is used. Use personal protective equipment only from reputable manufacturers.

Respiratory protection:

In normal conditions is not required. When general ventilation is not effective enough use masks with type A filter against organic vapours.

Hand protection: Wear protective gloves.

The material from which the gloves are made must be impermeable and resistant to the product. Use protective gloves made of neoprene or nitrile rubber. Min thickness 0.4 mm. If prolonged or often repeated contact with the product is expected, it is recommended to wear gloves with protection class 5 (breakthrough time greater than 240 minutes according to PN-EN 374). If only brief contact with the product is expected, it is recommended to wear gloves with protection class 3 or higher (breakthrough time greater than 60 minutes according to PN-EN 374). The resistance of materials from which gloves are made must be checked before use. Information on the permeation time of the substance from the gloves manufacturer must be obtained and this time must be observed. Gloves should be reviewed before use. Use the correct technique for removing gloves (without touching the outer surface of the glove) to avoid skin contact with the product. Dispose of contaminated gloves after use in accordance with applicable regulations. It is recommended to change gloves regularly and replace them immediately if they show any signs of wear, damage (rupture, perforation) or changes in appearance (color, elasticity, shape).

Eye protection:

wear safety glasses when working with the product. To protect the eyes use equipment certified according to the relevant standards.

Skin protection:

use suitable protective clothing when working with the product.

Protective equipment standards:

EN 140:2001 Respiratory protective devices - Half masks and quarter masks - Requirements, testing, marking
EN 143:2004 Respiratory protective devices - Particle filters - Requirements, testing, marking
EN 149+A1:2010 Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking
EN 14387+A1:2010 Respiratory protective devices - Gas filter(s) and combined filter(s) - Requirements, testing, marking

EN 374-1:2005 Protective gloves against dangerous chemicals and micro-organisms -- Part 1: Terminology and performance requirements for chemical risks
EN 374-2:2005 Protective gloves against chemicals and micro-organisms - Part 2: Determination of resistance to penetration
EN 374-3:2005 Protective gloves against chemicals and micro-organisms – Part 2: Determination of resistance to permeation by chemicals
PN-EN 166:2005 Personal eye protection. Specifications
PN-EN 14605+A1:2010 Protective clothing against liquid chemicals. Performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4])
PN-EN ISO 20344:2012 Personal protective equipment -- Test methods for footwear

Environmental exposure controls:
Do not allow to enter large amounts of product into ground water, sewage, waste water or soil.

PNECs (Predicted No Effect Concentrations) for mixture components:

Citral, CAS: 5392-40-5

Environmental protection target	PNEC
Fresh water	6.78 µg/L
Freshwater sediments	125 µg/kg sediment dw
Marine water	678 ng/L
Marine sediments	12.5 µg/kg sediment dw
Intermittent releases (freshwater)	67.8 µg/L
Food chain	No data available
Microorganisms in sewage treatment	1.6 mg/L
Soil (agricultural)	20.9 µg/kg soil dw
Air	No data available

2-methoxy-4-(prop-2-en-1-yl)phenol, CAS: 97-53-0

Environmental protection target	PNEC
Fresh water	1.13 µg/L
Freshwater sediments	81 µg/kg sediment dw
Marine water	113 ng/L
Marine sediments	8.1 µg/kg sediment dw
Intermittent releases (freshwater)	11.3 µg/L
Food chain	No data available
Microorganisms in sewage treatment	No data available
Soil (agricultural)	15.5 µg/kg soil dw
Air	No data available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: White to off-white liquid
Odour: Characteristic
Odour threshold: No data
pH: 7.2
Melting point/freezing point: No data
Initial boiling point and boiling range: No data
Flash point: No data
Evaporation rate: No data
Flammability: Not applicable

Upper/lower flammability or explosive limits:	Not applicable
Vapour pressure:	No data
Vapour density:	No data
density (20°C):	1.019
Solubility in water:	insoluble, dispersible
Partition coefficient: n-octanol/water:	Not applicable
Auto-ignition temperature:	No data
Decomposition temperature:	No data
Viscosity:	No data
Explosive properties:	No data
Oxidising properties:	No data

9.2. Other information
No data

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:
the product does not show reactivity under recommended storage and use conditions.

10.2. Chemical stability:
product is stable under normal conditions.

10.3. Possibility of hazardous reactions:
no data.

10.4. Conditions to avoid:
high temperature, direct sunlight, humidity.

10.5. Incompatible materials:
no data.

10.6. Hazardous decomposition products:
Under recommended conditions of storage and handling product does not decompose with evolution of hazardous decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:
Classification of the product was conducted by calculation method according to regulation 1272/2008 based on the content of hazardous ingredients.
Acute toxicity:
Acute Oral Toxicity: based on data available classification criteria are not met, ATE_{mix} > 2000 mg/kg
Acute Dermal Toxicity: based on data available classification criteria are not met, ATE_{mix} > 2000 mg/kg
Acute Inhalation Toxicity: based on data available classification criteria are not met, ATE_{mix} > 5 mg/l
Skin corrosion/irritation:
Based on available data, the classification criteria are not met.
Serious eye damage/irritation:
Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation:
Product classified as skin sensitizer, may cause an allergic skin reaction
Germ cell mutagenicity:
Product does not contain any compounds with germ cell mutagenicity hazard.
Carcinogenicity:
Product does not contain any compounds with carcinogenic hazard.
Reproductive toxicity:

Product does not contain any compounds with reprotoxic hazard.
STOT-single exposure:
Product does not met criteria for classification.
STOT-repeated exposure:
Product does not met criteria for classification.
Aspiration hazard:
Product does not met criteria for classification.

Potential health hazards:
Ingestion: no data
Inhalation: no data
Skin: may cause skin sensitization
Eyes: no data

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity:
Classification of the product was conducted by calculation method according to regulation 1272/2008 based on the content of hazardous ingredients.

Based on data available classification criteria are not met.

12.2. Persistence and degradability:
No data.

12.3. Bioaccumulative potential:
No data.

12.4. Mobility in soil:
No data..

12.5. Results of PBT and vPvB assessment:
Product does not met the criteria for PBT/vPvB according to Annex XIII of REACH regulation.

12.6. Other adverse effects:
Product is not classified as environmentally hazardous. Nevertheless do not introduce the product into soil, surface and ground water.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:
Waste from residues/unused products:
Unused remains keep in original containers. Get the wastes to the establishment authorized for transport, recovery and disposal of wastes. Residues of the product should be treated as hazardous waste. Disposal should be made through a company authorized to dispose of hazardous waste, in accordance with national and local regulations.

Disposing of the packaging:
Recycling or disposal of empty packaging must be performed in compliance with current legislation. Do not mixed with other wastes.

SECTION 14: TRANSPORT INFORMATION

No special transport measures necessary. Product does not fall under transport regulations (ADR, IATA DGR, IMDG CODE) Transport when covered. Protect packaging against relocation during transport.

14.1. UN number: doesn't concern
14.2. UN proper shipping name: doesn't concern
14.3. Transport hazard class: doesn't concern
14.4. Packing group: doesn't concern
14.5. Environmental hazards: no
14.6. Special precautions for user: see section 7.1
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code: doesn't concern

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council from 18.12.2006 concerning the Registration, Evaluation, Authorization and Restriction from Chemicals (REACH)
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- European agreement concerning international road transport of dangerous products (ADR)
- *Federal, State and Local regulations.*

15.2. Chemical safety assessment
Chemical safety assessment was not conducted for the product.

SECTION 16. OTHER INFORMATION

Explanation of abbreviations and acronyms used in safety data sheet

Full text of H phrases:

H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation

Skin Irrit. 2 – Skin irritation, category 2
Skin Sens.1 – Skin sensitization category 1
Eye Irrit. 2 – Serious eye Irritation, category 2

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road under framework Directive 94/55/EC, as amended
ATE Acute Toxicity Estimate: acute toxicity values are expressed as (approximate) LD50 (oral, dermal) or LC50 (inhalation) values or as ATEs.
CAS Chemical Abstracts Service
CPR Cardio-pulmonary resuscitation
DNEL derived no-effect level
EC50 median effective concentration
EINECS European Inventory of Existing Commercial Chemical Substances
GHS (United Nations) Globally Harmonised System of Classification and Labelling of Chemicals: it defines the criteria internationally agreed by the United Nation Economic and Social Council (UN ECOSOC) for the classification and labelling of hazardous substances and mixtures
ICAO International Civil Aviation Organisation, refers to Annex 18 to the Convention on International Civil Aviation The Safe Transport of Dangerous Goods by Air

IMDG International Maritime Dangerous Goods Code for the transport of dangerous goods by sea
IUPAC International Union of Pure and Applied Chemistry
LOEC Lowest Observed Effect Concentration
LD50 Lethal Dose; dose at which 50% of the animals will be expected to die.
LC50 Lenthal Concentration; standard measure of the toxicity of the surrounding medium that will kill half of the sample population of a specific test-animal in a specified period through exposure via inhalation
NOEC No Observed Effect Concentration
M factor Multiplying factor
NICNAS (Australia) National Industrial Chemicals Notification and Assessment Scheme
NIOSH (United States) National Institute of Occupational Safety and Health
OECD Organisation for Economic Cooperation and Development
OSHA (United States) Occupational Safety and Health Administration
PBT Persistent, bioaccumulative and toxic
PNEC Predicted No Effect Concentration
(Q)SAR (Quantitative) Structure-Activity Relationships
RTGD (United Nations) Recommendations on the Transport of Dangerous Goods
RTECS Registry of Toxic Effects of Chemical Substances
SVHC Substance of Very High Concern
Toxline Toxicology Literature Online database
TOXNET Toxicology Data Network
UFI Unique Formula Identifier
US EPA United States Environmental Protection Agency
vPvB very Persistent and very Bioaccumulative

The product is a mixture containing a copolymer, which does not have to be registered in light of REACH requirements ((EC) No 1907/2006). All components including copolymer components (monomers) meet the registration requirements.

This SDS was prepared in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Classification of the product was based on the content of ingredients and according to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Training
Before handling with the product, the user should be familiar with the principles of health and safety regarding the handling of chemicals, and in particular undergo appropriate workplace training.

References to key literature and data sources
The safety data sheet for this product has been create on the basis of a safety data sheet provided by the manufacturer, literature data, online databases and possessed knowledge and experience, taking into account the currently applicable to actual legislation.

The above information is based on currently available data characterizing the product as well as the experience and knowledge possessed by the manufacturer in this topic. It do not constitute a quality description of the product or promise of specific properties. It should be treated as an aid for safe handling during transport, storage and use of the product. This does not release the user from liability for incorrect use of the above information and from compliance with all legal regulations in this area.

End of the document