

MATERIAL SAFETY DATA SHEET

compliant with requirements of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning REACH (OJ of the EU L 396), with later amendments



Makler 250 SE

Compiled: 17.10.2018

Revised: 11.03.2020

Version: 1.1

Section 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Makler 250 SE

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

A plant protection product – fungicide in the form of suspoemulsions. To be used by professional users. Use only in accordance with label-instruction of use.

1.3. Details of the supplier of the Safety Data Sheet

Manufacturer: INNVIGO Sp. z o.o.

address: Al. Jerozolimskie 178, Warsaw, Poland

VAT Reg. No.: PL 557-16-98-060

phone: +48 22 468 26 70

e-mail: biuro@innvigo.com

Person responsible for the Safety Data Sheet: RD@chemirol.com.pl

1.4. Emergency telephone number in Poland

Toxicological centers:

Gdańsk (58) 682 04 04 Kraków (12) 411 99 99 Lublin (81) 740 89 83 Łódź (42) 657 99 00	Poznań (61) 847 69 46 Rzeszów (17) 866 40 25 Sosnowiec (32) 266 11 45 Tarnów (14) 631 54 09	Warszawa (22) 619 66 54 Wrocław (71) 343 30 08
--	--	---

Section 2. HAZARDS IDENTIFICATION

The product is classified as dangerous in accordance with applicable regulations.

2.1. Classification of the mixture

According to Directive 1272/2008 (CLP):

Aquatic Chronic 1 H410

Aquatic Acute 1 H400

Acute Tox.4 H302

Acute Tox.4 H332

2.2. Label elements

According to Directive 1272/2008 (CLP):



Warning

Risk phrases (H-phrases):

H410 – Very toxic to aquatic life with long lasting effects.

H302 – Harmful if swallowed.

H332 – Harmful if inhaled.

Safety phrases (P-phrases):

P273 – Avoid release to the environment.

P391 – Collect spillage.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P261 – Avoid breathing vapours.

P330 - Rinse mouth.

EUH401 – To avoid risks to human health and the environment, comply with the instructions for use.

EUH208 – Contains 1,2-benzisothiazolin-3-one . May produce an allergic reaction.

2.3. Other hazards

Other hazards are not identified.

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixture

Ingredients hazardous to human health or the environment:

Chemical name	Index No.	CAS No.	EC No.	Content [% w/w]	CLP Classification
Azoxystrobin Methyl (E)-2-[2-[6-(2-cyjanofenoksy) pirimidyn-4-yloksy]fenyl]-3-metoksyakryl	607-256-00-8	131860-33-8	-	25 %	Aquatic Chronic 1, H410, Aquatic Acute 1, H400, Acute Tox 3, H331
Fatty Alcohol Ethoxylate	-	68131-39-5	-	0.4 – 0.9%	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Skin Irrit. 2, H315
1,2-benzisothiazolin-3-one	-	2634-33-5	-	0.01 - 0.02 %	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400
Polyalkylene Oxide	-	-	-	< 0.01 %	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315

Symbol explanation and full phrasing of H-phrases is included in Section 16.

Section 4. FIRST AID MEASURES

4.1. Description of first aid measures

General recommendations:

Avoid contamination of skin, eyes and clothing. In case of exposure immediately remove all contaminated clothing. If it is danger of loss of consciousness, place and transport in stable lateral position. In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

Procedure in case of:

- inhalation: move the victim to fresh air. If necessary administer oxygen or apply artificial respiration. In the case of a stronger poisoning seek medical advice.
- skin contact: Wash skin with water, then with soap and water. If skin irritation occurs: Get medical advice/attention.
- eye contact: wash immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
- ingestion: do not induce vomiting unless specifically advised by a doctor. Wash mouth with water. Do not administer anything orally if the victim is unconscious.

In the case of getting into the mouth or swallowed the following measures should be considered: Gastric lavage with charcoal, if necessary - further treatment.

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

No data.

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

The decision on how to proceed made by a doctor after examination of the injured.

Antidote: none.

Treat symptomatically.

Section 5. FIREFIGHTING MEASURES

General recommendations:

Section 5. FIREFIGHTING MEASURES

Remove from the area all unauthorized personnel and persons not participating in elimination of the fire. Do not breathe fumes from fire or explosion. Eliminate sources of ignition, do not smoke. If necessary call the Fire Service.

5.1. Extinguishing media

Appropriate media:

Foam, dry chemicals, carbon dioxide, sand or earth,; if necessary use water spray. Use fire extinguishing methods suitable to surrounding conditions.

Unsuitable media:

High-volume water jet.

5.2. Special hazards arising from the mixture

During fire dangerous gases may be evolved: nitrogen oxides (NO_x), carbon oxides (CO_x). Exposure to products of combustion may be a health hazard. Do not breathe fumes, gases or vapor.

5.3. Advice for firefighters

Use full protective clothing and a self-contained breathing apparatus. Isolate the exposed area. Isolate the water used for elimination of fire, do not allow it to enter sewers. Containers exposed to fire with water spray. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective measures – protective clothing, protective gloves, face shield. Avoid contact with skin, eyes and clothing. Avoid contact with spilled or released material. Restrict access to the area of bystanders failure until completion of the appropriate cleaners.

6.2. Environmental precautions

Do not empty into drains. Do not allow the product to enter sewers, ditches or waterways. Use appropriate containment to avoid environmental contamination. In the case of environmental contamination notify the relevant services.

6.3. Methods and material for containment and cleaning up

Collect damaged containers and place in an airtight container replacement.

Small spillage:

Collect immediately by vacuum and place in appropriate waste container.

Large spillage:

Avoid formation of dust. Isolate the spillage area. Collect with an electrically secured vacuum or wet sweep and place in appropriate waste container. For proper cleanup wash the spillage area with plenty of water.

6.4. Reference to other sections

Dispose of in accordance with recommendations listed in Section 13 of the Safety Data Sheet. During cleanup use personal protective measures as indicated in Section 8.

Section 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Follow the Occupational Safety and Health rules and regulations on handling chemicals. Use personal protective measures listed in Section 8. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Store only in original containers, properly labeled and tightly closed in a dry, in a place inaccessible to unauthorized personnel. Keep away from children and animals. Do not store with food, drink or animal foodstuffs. Store in a dry, well-ventilated, cool place.

The prohibition of storage in a residential area.

7.3. Specific end use(s)

Strictly follow the label-instruction of use of the plant protection product.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Occupational Exposure Limits of mixture ingredients:

[Regulation of the Minister of Labor and Social Policy of 29 November 2002 concerning highest allowable concentrations and intensities

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

of harmful agents in the work environment (J. of L. 2002 No. 217, item 1833) with later changes]

no recommendations

Occupational Exposure Limits of mixture ingredients recommended by the manufacturer:

no recommendations

8.2. Exposure controls
Personal protective measures

The need for and selection of appropriate security measures should take into account the type of threat posed by the product, workplace conditions and the treatment of the product. Wear protective reputable manufacturers.

- Eye / face protection: Tight-fitting goggles and face shield (type goggles, e.g. EN 166)
- Hands protection: protective gloves made of natural rubber, butyl, neoprene (rubber polichloropropylowy), nitrile and other materials resistant to chemical agents (BS EN 374-1: 2005). It is recommended to use a protective cream to your hands.

The material from which gloves are made:

The selection of suitable gloves does not only depend on the material, but also on the brand and quality resulting from differences in manufacturers. Resistance of the material, the glove can be determined after the tests. The exact time of the destruction of the protective gloves must be determined by the manufacturer.

Other:

Body protection must be chosen depending on activity and possible exposure, eg. Apron, protective boots, chemical-resistant protective clothing (according to EN 14605)

- Respiratory protection: avoid breathing vapor of the product or the prepared spray mixture. Where the risk assessment is recommended to use air-purifying respirator, use a full-face particle respirator type N99 (US) or type of respirator cartridges P2 (EN 143) as a backup to engineering controls. If the respirator is the only means of protection, use a full-face supplied air. Use respirators and components tested and corresponding to the appropriate standards
- Thermal hazards: not present

Wash hands before every break and after work.

Work only in well-ventilated rooms.

Avoid contact with skin and eyes.

Environmental exposure controls

Do not empty into drains. Use containers to prevent the uncontrolled release into the environment of concentrate.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	homogenous white liquid
Odor:	characteristic
Odor threshold:	No data available
pH of 1% aqueous solution:	6,56 - 6,86
Melting/Freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	does not have a flashpoint
Evaporation rate:	No data available
Flammability:	not applicable
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	1,072 g/ml (20°C)
Solubility:	forming a suspension
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	does not have auto-ignition temperature
Decomposition temperature:	No data available
Viscosity:	123 mPa • s for a shear rate of 10.0 s ⁻¹ (20 ° C)
Explosive properties:	Not explosive
Oxidizing properties:	Not oxidizing

9.2. Other information

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Surface tension: 31.4 mN / m

Section 10. STABILITY AND REACTIVITY

10.1. Reactivity

No reactivity under normal handling and storage conditions.

10.2. Chemical stability

Stable under normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions, including hazardous polymerization, do not take place.

10.4. Conditions to avoid

Avoid temperatures beyond the recommended storage range. Protect from direct sunlight.

10.5. Incompatible materials

To be used only in accordance with the label-instruction of use. Use in mixtures with products other than recommended is prohibited.

10.6. Hazardous decomposition products

Not determined. Hazardous products of thermal decomposition are described in Section 5.

Section 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Data concerning the mixture:

Acute toxicity:

- oral (rat):	LD50 > 300 mg/kg m.c.
- dermal (rabbit):	LD50 > 2000 mg/kg m.c.
- inhalation (rat):	LD50 = air (particle size < 2 µm) LD50 > 4.7 mg/l air (particle size < 15 µm)

Irritation:

- eyes (rabbit):	not irritant to rabbit eye (according to Regulation 1272/2008/WE)
- skin (rabbit):	not irritant to rabbit skin (according to Regulation 1272/2008/WE)

Sensitization:

- skin (guinea pig):	not sensitization (based on the classification Magnusson& Kligman, beyond categorization according to the criteria of the Regulation 1272/2008/EC)
----------------------	--

Caustic effect: The product contains corrosive substances (<1%) .

Sensitization: the product contains ingredient identified sensitizing.

Carcinogenicity: Product contains no ingredients identified carcinogenic.

Mutagenicity: product does not contain ingredients identified mutagenic.

Reproductive toxicity: the product does not contain ingredient identified harmful effect on reproduction.

Operation target organ toxicity - single exposure:

It is unlikely that the product under normal conditions of use and handling of him, causing harmful effects.

Operation target organ toxicity - repeated exposure:

It is unlikely that the product under normal conditions of use and handling of him, causing harmful effects.

Information on likely routes of exposure - WARNING! The product is not fully explored!

Skin contact :	may cause irritation, skin sensitization
Skin absorption:	may be harmful if absorbed through the skin
Eye contact:	may cause irritation of the eyes
Inhalation:	may be irritating to mucous membranes and upper respiratory tract
Ingestion:	<u>may be harmful if swallowed</u>

Section 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Data concerning the mixture:

Section 12. ECOLOGICAL INFORMATION

Toxicity for water organisms:

- fish (*Rainbow trout*): LC50/96 h = 2.88 mg/L
- daphnia (*Daphnia magna* Straus): EC50/48 h = 1.14 mg/L
- algae (*Pseudokirchneriella* sub.): EyC50/72h <1 mg/L
ErC50/72h = 1.99 mg/L

Toxicity for honeybees (*Apis mellifera* L.):

- oral: LD50 = 100 µg product/bees
- contact: LD50 = 100 µg product/bees

12.2. Persistence and degradability

Azoxystrobin: medium to high persistence, DT50 35.2-248 days (20°C, soil moisture pF2)

12.3. Bioaccumulative potential

Azoxystrobin: BCF – n.n, LogPow = 2.5

12.4. Mobility in soil

Azoxystrobin: Koc = 423/482 mL/g

12.5. Results of PBT and vPvB assessment

None of the mixture ingredients is included in the ECHA candidate list of PBT or vPvB substances.

12.6. Other adverse effects

Information pointing to other adverse effects of use of the mixture is not available.

Section 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal of product waste:

Do not empty into drains. Do not contaminate surface waters (ponds, water ways, ditches). Dispose of as hazardous material.

European Waste Code: 02 01 08 Agrochemical waste containing dangerous substances, including plant protection products of I and II toxicity class (very toxic and toxic).

Disposal of containers:

Triple rinse empty product containers and place the rinsate in the spray tank. Do not re-use empty containers for any purpose, including recycling. Return empty product containers to the product supplier. Dispose of as hazardous material.

It is forbidden to burn packages of the plant protection product on its own.

DO NOT USE EMPTIED PACKAGING PLANT PROTECTION PRODUCTS FOR OTHER PURPOSES, INCLUDING THEIR TREATMENT AS A RECYCLING

Section 14. TRANSPORT INFORMATION

Land transport ADR/RID:

14.1. UN number: UN 3082.

According to special provision 375 of Chapter 3.3.1 of the ADR, the carriage of goods in unit packages containing no more than 5 liters of material, delivered individually or in packagings of combined packaging, is not subject to any other ADR regulation provided that the packaging complies with the requirements of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 ADR.

14.2. UN proper shipping name:

ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid, I.N.O

RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, Liquid, I.N.O

14.3. Transport hazard class(es): 9/M6

14.4. Packaging group: III.

14.5. Environmental hazards: yes

14.6. Special precautions for user: special provisions apply. 5.2.1.8.; rules specials: 274, 335, 375, 601.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

Section 15. REGULATORY INFORMATION

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

Section 15. REGULATORY INFORMATION

Legislation:

- REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ of the EU L 396), with later changes
- REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ of the EU L 353), with later changes
- DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labeling of dangerous preparations (OJ of the EU L 200), with later changes
- BILL on chemical substances and mixtures (J. of L. 2011 No. 63, item 322), with later changes
- The European AGREEMENT concerning the International Carriage of Dangerous Goods by Road (ADR), version in force since 01.01.2011
- ORDINANCE of the Minister of Economy, Labor and Social Policy No. 1 of 12.02.2003 regarding ADR; ORDINANCE of the Minister of Economy and Labor No. 8 of 21.07.2004 regarding RID
- REGULATION of the Minister of Labor and Social Policy of 29 November 2002 concerning highest allowable concentrations and intensities of harmful agents in the work environment (J. of L. 2002 No. 217, item 1833) with later changes
- BILL of 11 May 2001 on packaging and packaging waste (J. of L. 2001 No. 63, item 638), with later changes
- REGULATION of the Minister of Environment of 27 September 2001 concerning waste catalogue (J. of L. 2001 No. 112, item 1206), with later changes
- REGULATION of the Minister of Labor and Social Policy of 31 May 2003 concerning basic requirements for personal protective equipment (J. of L. 2003 No. 80, item 725), with later changes
- REGULATION of the Minister of Labor and Social Policy of 26 September 1997 concerning general regulations on occupational safety and health (J. of L. 1997 No. 129, item 844), with later changes
- REGULATION (EC) No 1107/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC
- Act of 18 December 2003 r. on the plant protection (J. of L. 2004 No. 11, item. 94 with later changes)

15.2. Chemical safety assessment

It is not required.

Section 16. OTHER INFORMATION

Changes introduced at revision of the Safety Data Sheet:

Supplemented by the results of the study: physicochemical, toxicological and ecotoxicological properties. Classification of the mixture according to Regulation CLP.

Sources of data for preparation of the Safety Data Sheet:

This document is prepared according to results of manufacturer's own studies, as well as based on information supplied by manufacturers of ingredients of the formulation and data on ingredients of the formulation available at EU level.

Symbols and H-phrases used in Section 3 and not included in Section 2:

Aquatic Chronic – chronic risk to aquatic environment
Aquatic Acute – acute risk to aquatic environment
Acute Tox. - acute toxicity

Other abbreviations and acronyms:

DT50 - period required for 50 percent disappearance (define method of estimation)
ER50 - emergence rate/effective rate, median
ErC50 - effective concentration (growth rate)
EC50 - effective concentration
CAS - Chemical Abstract Service
BCF - bioconcentration factor
AOEL - acceptable operator exposure level
a.s. - active substance
bw - body weight
LC50 - lethal concentration, median

Data included in this Safety Data Sheet is based on current knowledge and applies to the product in its formulation of use. This information is intended exclusively as guidance on safe handling, transport, use, storage and waste disposal and is not to be identified with a warranty or a quality certificate. The user is responsible for consequences resulting from inadequate use of information presented in this Safety Data Sheet or from inappropriate use of this product.