

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



DelTop 050 CS

Compiled: 17.10.2018
Revised: 18.12.2020
Version: 1.2

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

1.1. Product identifier

DelTop 050 CS

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

A plant protection product – insecticide in the form of an aqueous microcapsule suspension liquid for dilution in water. 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
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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/WE (CLP)

Aquatic Chronic 1 H410
Aquatic Acute 1 H400
Resp. Sens.1 H334
Acute Tox.4 H332
Eye Irrit. 2 H319
Skin Irrit. 2 H315

2.2. Label elements

According to Directive 1272/2008/WE (CLP)



Risk phrases (H-phrases):

- H410** – Very toxic to aquatic life with long lasting effects.
- H334** – May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H319** – Causes serious eye irritation.
- H315** – Causes skin irritation.
- H332** – Harmful if inhaled.

Safety phrases (P-phrases):

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

P302+P352 – IF ON SKIN: Wash with plenty of water/...

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P260 – Avoid breathing dust/fume/gas/mist/vapours/ spray.

P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

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. REACH No.	CAS No.	EC No.	Content [% w/w]	CLP Classification
Deltamethrin	-	52918-63-5	-	4.7 – 5.7%	Aquatic Acute 1 H400; Aquatic Chronic 1 H410 M=1000000 Acute Tox. 3 H331; Acute Tox. 3 H301
Diphenylmethane Diisocyanate, isomers and homologues	-	9016-87-9	-	1.0 - 1.7	Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334
2,2'- iminodi(ethylamine)	612-058-00-X	111-40-0	-	0.4	Acute Tox.4 H312; Acute Tox.4 H302; Skin Sens.1 H317; Skin Corr.1B H314
1,2-benzisothiazol-3(2H)- one	613-088-00-6 01-2120761540- 60-XXXX	2634-33-5	220-120-9	< 0.03 %	Acute Tox. 4 H302 Eye Dam. 1 H318 Skin Irrit.2 H315 Skin Sens 1 H317 Aquatic Acute 1 H400
Calcium Dodecylbenzene sulfonate	- 01-2119560592- 37-0011	26264-06-2	247-557-8	< 0.05%	Eye Irrit. 2 H319 Skin Irrit. 2 H315
n-butanol	603-004-00-6 01-2119484630- 38	71-36-3	200-751-6	< 0.05%	Flam. Liq.3 H226 Acute Tox. 4 H302 STOT SE.3 H335 Skin Irrit. 2 H315 Eye Dam 1 H318 STOT SE. 3 H336

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 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.
- skin contact: wash immediately with plenty of water and soap. If irritation develops and persists contact a physician.
- eye contact: wash immediately with plenty of water, also under the eyelids, for at least 15 minutes. Contact a specialist.
- 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.

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

No data available.

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

Antidote: none.
Treat symptomatically.

Section 5. FIREFIGHTING MEASURES

General recommendations:

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

5.1. Extinguishing mediaAppropriate media:

Foam, dry chemicals, carbon dioxide; if necessary use water spray.

Unsuitable media:

High-volume water jet.

5.2. Special hazards arising from the mixture

During fire dangerous gases may be evolved: hydrogen chloride, 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. Keep containers cool water. Isolate the water used for elimination of fire, do not allow it to enter sewers.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

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 contamination of rivers or lakes notify the appropriate emergency services.

6.3. Methods and material for containment and cleaning upSmall 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 recommendation 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. Avoid contact with skin and eyes. Do not breathe vapor or mist. Use with adequate ventilation. At work do not eat, drink or smoke. Before eating, drinking or smoking wash hands and face. Remove contaminated clothing and protective equipment before entering eating areas. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Store only in original containers, tightly closed in a dry, well-ventilated place at temperature not lower than 0 °C and not exceeding 30 °C. Store in a place inaccessible to unauthorized personnel. Keep away from children and animals. Do not store with food, drink or animal foodstuffs. Store away from heat and hot surfaces.

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 parametersOccupational Exposure Limits of mixture ingredients:

[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]

no recommendations

Occupational Exposure Limits of mixture ingredients recommended by the manufacturer:

Deltamethrin 8h TWA: 0.28 g/m³

8.2. Exposure controls

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)
- Skin protection: protective gloves recommended for handling chemicals (EN 374 e.g. nitrile rubber (0.4 mm), chloroprene rubber (0, 5 mm), butyl rubber (0.7 mm). Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, gas-tight and resistant to chemical-protection suit (according to EN 14605)
- Respiratory protection: avoid breathing vapor of the product or the prepared spray mixture; in case of insufficient ventilation wear breathing masks with appropriate filters or a self-contained breathing apparatus ((filter with medium efficiency for solid and liquid particles e.g. EN 143 or 149, Type P2 I FFP2).
- Thermal hazards: not present

Environmental exposure controls.

Use containers to prevent the uncontrolled release into the environment of concentrate.

Wash hands before every break and after work.

Work only in well-ventilated rooms.

Avoid contact with skin and eyes.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:	Microcapsule suspension, creamy
Odor:	slightly aromatic
Odor threshold:	not determined
pH of 1% aqueous solution:	4 - 5
Melting/Freezing point:	No determined
Initial boiling point and boiling range:	Boiling point ~ 100°C
Flash point:	> 60°C
Evaporation rate:	not determined
Flammability:	Not determined
Upper/lower flammability or explosive limits:	not applicable
Vapor pressure:	not determined
Vapor density:	not determined
Relative density:	1,015 g/ml
Solubility:	create a suspension
Partition coefficient: n-octanol/water:	not determined
Auto-ignition temperature:	> 650 °C
Decomposition temperature:	not determined
Viscosity:	Not determined
Explosive properties:	non-explosive
Oxidizing properties:	non-oxidizing
characteristics of particles	Not determined

9.2. Other information

Surface tension: 46,4 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 > 2000 mg/kg b.w.
- dermal (rat): LD50 > 2000 mg/kg b.w.
- inhalation: Based on the composition, product is not classified.

Irritation:

- eyes (rabbit): irritant for eye (according to Regulation 1272/2008/EC – Eye Irrit. 2 H319)
- skin (rabbit): irritant to skin (according to Regulation 1272/2008/EC – Skin Irrit. 2 H315)

Sensitization:

sensitizer (based on the classification Magnusson and Klingman)

Data concerning the components:

Acute toxicity:

Inhalation (rat) delthametrin LC50 /4h > 0.6 mg/L

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Resp. Sens. 1, H334)

Carcinogenicity: product does not contain ingredients identified carcinogenic.

Mutagenicity: product does not contain ingredients identified mutagenic.

Reproductive toxicity: the product does not contain ingredients 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: may be harmful if swallowed

Section 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Data concerning the mixture:

Toxicity to water organisms:

- fish (Rainbow trout):
- daphnia magna:
- algae:

LC50/96 h = 1.44 mg/L
EC50/48 h = 0.52 mg/L
EyC50/72h = 85.41 mg/L
ErC50/72h > 100 mg/L

12.2. Persistence and degradability

Delthametrin: DT₅₀ = 14.7d

12.3. Bioaccumulative potential

Delthametrin: BCF = 1.400

12.4. Mobility in soil

Delthametrin : Koc = 10240000 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 methodsDisposal 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.

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: ENVIRONMETALLY HAZARDOUS SUBSTANCE, Liquid, I.N.O

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

(contains Delthametrin 5%)

14.3. Transport hazard class(es): 9/M6**14.4. Packaging group:** III**14.5. Environmental hazards:** nr 90**14.6. Special precautions for user:** Marine pollutant**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** No information.

Section 15. REGULATORY INFORMATION

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

- 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
- REGULATION OF THE MINISTER OF HEALTH of 4 September 2007 amending the regulation concerning criteria and methods of classification of chemical substances and preparations (J. of L. 2007 No. 172, item 1222), with later changes
- REGULATION of the Minister of Health of 2 March 2009 concerning labeling of dangerous substances and preparations and certain chemical preparations (J of L. 2009 No. 53, item 439), with later changes
- The European AGREEMENT concerning the International Carriage of Dangerous Goods by Road (ADR), version in force since 01.01.2007
- 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:

Classification according to CLP, to supplement the results of the research. Actualization.

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 delivered 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:

H400 – Very toxic to aquatic life.

H410 – Very toxic to aquatic life with long lasting effects

H332 Harmful if inhaled.

H373 – May cause damage to organs through prolonged or repeated exposure exposure cause the hazard.

H302 Harmful if swallowed.

H319 – Causes serious eye irritation.

H317 – May cause an allergic skin reaction.

H315 – Causes skin irritation.

H335 May cause respiratory irritation.

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.