



Safety Data Sheet dated 21/3/2017, version 1

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

1.1. Product identifier

Mixture identification:

Trade name: IC-REFL-MAT-BULK-THERMA BIGMAT PHIL V16

Trade code: ZSDS63490

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

Recommended use: Solid insecticide

Uses advised against: Anything not relevant to the recommended uses.

1.3. Details of the supplier of the safety data sheet

Company:

ZOBELE HOLDING S.p.A

Via Fersina 4

38123 - Trento (Italy)

ZOBELE HOLDING S.p.A - Phone n.+390461/303700 (Working hours)

Competent person responsible for the safety data sheet:

info@zobe.com

1.4. Emergency telephone number

ZOBELE HOLDING S.p.A - Phone n.+390461/303700 (Working hours)

SECTION 2: Hazards identification

The product contains the following active substances:

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

 Warning, Acute Tox. 4, Harmful if inhaled.

 Warning, Acute Tox. 4, Harmful if swallowed.

 Warning, Aquatic Acute 1, Very toxic to aquatic life.

 Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H302+H332 Harmful if swallowed or if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

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P102 Keep out of reach of children.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P331 Do NOT induce vomiting.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH066 Repeated exposure may cause skin dryness or cracking.

PACK2 The packing must have tactile indications of danger for blind people.

Contains

d-Allethrin;(Pynamin forte); (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl
(1R,3R;1R,3S)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate
Hydrocarbons, C12-C16, isoalkanes,cyclic <2% aromatics
Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

Special provisions according to Annex XVII of REACH and subsequent amendments:
None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 60% - < 70%	d-Allethrin;(Pynamin forte); (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1R,3R;1R,3S)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate	Index number: 006-025-00-3 CAS: 231937-89-6 EC: 209-542-4	 3.1/4/Inhal Acute Tox. 4 H332  3.1/4/Oral Acute Tox. 4 H302  4.1/A1 Aquatic Acute 1 H400 M=100.  4.1/C1 Aquatic Chronic 1 H410
>= 20% - < 25%	Hydrocarbons, C12-C16, isoalkanes,cyclic <2% aromatics	EC: 927-676-8	 3.10/1 Asp. Tox. 1 H304 EUH066
>= 5% - < 7%	Hydrocarbons, C11-C13, isoalkanes, <2% aromatics	EC: 920-901-0	 3.10/1 Asp. Tox. 1 H304 EUH066

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

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In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

None

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep container dry. Keep away from heat. Protect from direct sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrocarbons, C12-C16, isoalkanes, cyclic <2% aromatics
20101.13 - TWA: 200 mg/m³ - Notes: Forma: Non

Aerosol Nota: Pelle OEL - Italia

DLgs. 81/08

TLV TWA - 200 mg/m³

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

TLV TWA - 1200 mg/l

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: in presence of oil mists and if the product is handled without adequate containment means: use full or half-face masks with filter for mists/aerosols. In case there is a

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significant presence of vapours (e.g. through handling at high temperature), use full or half-face masks with filter for hydrocarbon vapours. (EN 136/140/145).
Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure. (EN 136/140/145)

Thermal Hazards:

None

Environmental exposure controls:

Emissions from production processes, including those from ventilation should be checked for the purposes of compliance with the regulations environmental protection.

Product residues should not be discharged without control in wastewater or d'acqua courses

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Solid insecticide	--	--
Odour:	conform	--	--
Odour threshold:	not available	--	--
pH:	not available	--	--
Melting point / freezing point:	not available	--	--
Initial boiling point and boiling range:	not available	--	--
Flash point:	>65°C	--	--
Evaporation rate:	not available	--	--
Solid/gas flammability:	not available	--	--
Upper/lower flammability or explosive limits:	not available	--	--
Vapour pressure:	not available	--	--
Vapour density:	not available	--	--
Relative density:	not available	--	--
Solubility in water:	not available	--	--
Solubility in oil:	not available	--	--
Partition coefficient (n-octanol/water):	not available	--	--
Auto-ignition temperature:	not available	--	--

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Decomposition temperature:	not available	--	--
Viscosity:	not available	--	--
Explosive properties:	not available	--	--
Oxidizing properties:	not available	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	not available	--	--
Fat Solubility:	not available	--	--
Conductivity:	not available	--	--
Substance Groups relevant properties	not available	--	--

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

Acute effects: ingestion of this product is harmful. Even small amounts of product may cause serious health problems (stomach pain, nausea, sickness, diarrhoea). Acute effects: inhalation of this product is harmful. Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness. In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema.

Adverse health effects

Repeated exposure may cause skin dryness or cracking.

Toxicological information of the main substances found in the product:

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d-Allethrin;(Pynamin forte); (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl
(1R,3R;1R,3S)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate - CAS:
231937-89-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 900 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 3.85 mg/l - Duration: 4h

Hydrocarbons, C11-C13, isoalkanes, <2% aromatics

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat 5000 mg/m3 - Duration: 8h

Test: LC50 - Route: Oral - Species: Rat 5000 mg/kg

Test: LC50 - Route: Skin - Species: Rabbit 5000 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

e) germ cell mutagenicity;

f) carcinogenicity;

g) reproductive toxicity;

h) STOT-single exposure;

i) STOT-repeated exposure;

j) aspiration hazard. May be fatal if swallowed and enters airways. (Conclusive but not sufficient for classification) Viscosity, kinematic: > 20,5 mm²/s (40 °C) (ASTM D 445)

Potential Adverse human health effects and symptoms : Aspiration into lungs can cause a chemical pneumonia. Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

d-Allethrin;(Pynamin forte); (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl
(1R,3R;1R,3S)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate - CAS:
231937-89-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.134 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia 0.047 mg/l - Duration h: 48

12.2. Persistence and degradability

None

d-Allethrin;(Pynamin forte); (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl
(1R,3R;1R,3S)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate - CAS:
231937-89-6

Biodegradability: Non-readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. -

Notes: N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

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- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number
ADR-UN number: 3077
IATA-Un number: 3077
IMDG-Un number: 3077
- 14.2. UN proper shipping name
ADR-Shipping Name: Environmentally hazardous substance solid (d-allethrin)
IATA-Technical name: Environmentally hazardous substance solid (d-allethrin)
IMDG-Technical name: Environmentally hazardous substance solid (d-allethrin)
- 14.3. Transport hazard class(es)
ADR-Class: 9
IATA-Class: 9
IMDG-Class: 9
- 14.4. Packing group
ADR-Packing Group: III
IATA-Packing group: III
IMDG-Packing group: III
- 14.5. Environmental hazards
- 14.6. Special precautions for user
IMDG-Technical name: Environmentally hazardous substance solid (d-allethrin)
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n.1272/2008 (CLP), Regulation (CE) n.790/2009.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
Product belongs to category: E1

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15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Text of phrases referred to under heading 3:

H332 Harmful if inhaled.

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H304 May be fatal if swallowed and enters airways.

EUH066 Repeated exposure may cause skin dryness or cracking.

Hazard class and hazard category	Code	Description
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Acute Tox. 4, H332	Calculation method
Acute Tox. 4, H302	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

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It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to
the specific use intended.

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