Kwizda Biocides

Material Safety Data Sheet

1. PRODUCT AND COMPANY

1.1 Product identifier

Product : **DOBOL FUMIGATOR**

1.2 Identified uses

Use : Biocide product (PT 18)
Insecticide water reactive fumigator (FD)

1.3 Supplier's details

Company : **Pelsis Ltd**
Sterling House,
Grimbald Crag Close Knaresborough
HG5 8PJ
UK,
Tel: +44 (0) 800 988 5359

1.4 Emergency call

Pelsis' Emergency Number: +44 (0) 800 988 5359

NHS 111:
NHS 24 (Scotland): 111

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture

Classification according to Regulation (EC) No 1272/2008



GHS09 **GHS08** **GHS07**

Signal word : DANGER

Resp. Sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye Dam. 2	H319 Causes serious eye irritation.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.
STOT SE 3	H335 May cause respiratory irritation.

Hazard-determining components of labelling:
- Calcium oxide
- C,C'-azodi(formamide)

2.2 Label elements

Identification symbol and letter

Classification according to Regulation (EC) No 1272/2008



GHS07 **GHS09** **GHS08**

Signal word : DANGER

Resp. Sens. 1	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye Dam. 2	H319 Causes serious eye damage.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.
STOT SE 3	H335 May cause respiratory irritation.

Precautionary statement:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children. (amateur only)
P103 Read label before use. (amateur only)
P261 Avoid breathing mist.
P273 Avoid release to the environment.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P341+P342 +P311 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
P405+P403+P233 Store locked up in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment : Not applicable.

3. COMPOSITION / INFORMATION ON COMPONENTS

Chemical characterization: mixture
Description: Water reactive fumigator containing 7,2% of Cyphenothrin

Name	N°CAS / EC	Concentration	Classification 67/548/EEC	CLP Classification (R1272/2008)
Active ingredient(s)				
Cyphenothrin (commercial: name Gokilaht)	39515-40-7	7,2% (m/m)	Xn harmfull, R20/22, N Dangerous for the environment R50/R53	GHS07, GHS09, Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H332

Other components				
Azodicarbonamide	123-77-3	90.8% (m/m)	E; Xn; R2-R42	GHS08 , Resp. Sens. 1, H334

Exothermic substance :

- Quick lime (calcium oxide)

Quantity: 65g of quick lime for a capsule of 10g
76g of quick lime for a capsule of 20g
255g of quick lime for a capsule of 100g
CAS number : 1305-78-8 EINECS : 215-138-9
Classification : Xi.irritant, R37/38- R41

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of unconsciousness place patient stably in side position for transportation.

After skin contact
Take off contaminated close and shoes. Wash contaminated area with soap and water. If pain or other abnormal symptoms occurs, seek medical attention immediately.

After eye contact
May cause mild irritation if in contact during fumigation. Rinse opened eye for several minutes under running water. Remove contact lenses if possible, and wash eye and behind eye-lids thoroughly. Seek medical advice immediately.

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor.

After swallowing
Do not induce vomiting. Rinse out mouth and then drink plenty of water. Seek medical advice immediately, informing this product is a pyrethroid insecticide.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

CO2, dry chemical powder, foam. Do not use water.

5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx), Carbon monoxide (CO) and Carbon dioxide (CO_2)

5.3 Advice for firefighters

Wear self-contained respiratory equipment and full protective suit

Other recommendations

For safety reasons unsuitable extinguishing agents: water spray/water with full jet if you cannot contain runoff to prevent entry into water or drainage systems.
In the case of fire wear self-contained respiratory equipment and full protective suit. Contain runoff to prevent entry into water or drainage systems.

6. ACCIDENTAL RELEASE MEASURE

6.1 Personal precautions, protective equipement and emergency procedure :

Keep unprotected persons away. Do not breathe dust. Do not breathe vapours. Avoid contact with skin and eyes.
Please notice instructions for person-related safety precautions and wear protective equipment (see 8.)

6.2 Environnemental precautions

Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case product reaches water or sewage system.

6.3 Methods and material for containment and cleaning up

Pick up mechanically the solid product into a container suitable for its recovery or disposal. Ensure adequate ventilation.
Place into lockable, labelled salvage container for disposal according to the regulations.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
Avoid contact with skin and eyes.
If dust/smoke is developed, avoid breathing dust/smoke.
Make sure that all applicable workplace limits are observed.
Keep away humidity and water.
Avoid contact with water.
Protect from fire.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures
Store in tightly closed containers in a cool, well ventilated and dry place. Do not store food,beverages and animal feeding stuffs in the storage area. Keep container tightly sealed. Only store in the original packaging. Do not re-use the empty packaging. Sensitive to frost. Keep away humidity and water.Protect from fire.

Temperature
Ambient

7.3 Specific end use(s)

8. EXPOSURE CONTROL / PERSONNAL PROTECTION

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

1305-78-8 Calcium oxide
WEL (Great Britain)
Long-term value: 2 mg/m³

123-77-3 C,C'-azodi(formamide)
WEL (Great Britain)
Short-term value: 3.0 mg/m³
Long-term value: 1.0 mg/m³

8.2 Exposure control

General protective and hygienic measures:
Keep away from foodstuffs, beverages and food.
Instantly remove any contaminated garments.
Do not inhale dust / smoke / mist.
Do not breathe vapours.
Wash hands during breaks and at the end of the work.
The usual precautionary measures are to be adhered to when handling chemicals

Respiratory protection:



Use breathing protection in case of dust formation. In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Protection of hands:



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.
Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed safety glasses

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment
Do not allow to enter sewers/ surface or ground water.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form: Granulate
Colour: yellow to orange
Smell: characteristic
Odour threshold: no data available
pH-value: no data available
Melting point/Melting range: not determined
Boiling point/Boiling range: not determined
Flash point: not applicable
Inflammability (solid, gaseous) Product is not flammable.
Ignition temperature: not determined
Decomposition temperature: not determined
Self-inflammability: Product is not selfigniting.
Danger of explosion: Product is not explosive.
Critical values for explosion:
Lower: no data available
Upper: no data available
Oxidizing properties not applicable
Vapor pressure: not determined
Density: not determined
Solubility in / Miscibility with
Water: Reacts with water.
Partition coefficient (n-octanol/water): not applicable
Viscosity:
dynamic: not applicable
kinematic: not applicable

9.2 Other informations

No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under usual conditions

10.2 Chemical stability

Avoid thermal decomposition do not overheat.

10.3 Possibility of hazardous reaction

No hazardous reactions known if used according to specifications

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

Strong oxidizing agents, water

10.6 Hazardous decomposition products

Nitrogen oxides (NOx), Carbon monoxide (CO) and Carbon dioxide (CO_2)
Decomposes in contact with water under formation of insecticidal smoke.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

LD/LC50 values relevant for classification:

Oral LD50	> 10000 mg/kg (rat) product
Dermal LD50	> 5000 mg/kg (rat) product
Inhalative LC50/4h	> 1050 mg/m³ (rat) Product

Ingredients acute toxicity:
C,C'-azodi(formamide) (CAS 123-77-3)
Oral LD50 > 6800 mg/kg (rat)

alpha-cyano-3-phenoxybenzyl 2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate (CAS 39515-40-7)

LD_{50} oral male rat :	318 mg/kg.
LD_{50} oral female rat :	419 mg/kg.
LD_{50} dermal female rat :	> 5000 mg/kg.
LC_{50} inhalation rat :	> 1.85 mg/l/4h

Primary irritant effect:

· **on the skin:** Slightly irritating
· **on the eye:** Strong irritant with the danger of severe eye injury.
· **Sensitization:** Sensitization possible by inhalation.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
According to present knowledge no CMR-effects known

Additional toxicological information:
No further information available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecotoxical effects:

Calcium oxide (CAS 1305-78-8)
EC50/48 h 159.6 mg/l (water flea (daphnia magna))
LC50/24 h 160 mg/l (freshwater shrimp (Gammarus. sp.))

LC50/96 h 1070 mg/l (carp (cyprinus carpio))

Alpha-cyano-3-phenoxybenzyl 2,2-dimethyl-3-(2-methylprop-1enyl)cyclopropanecarboxylate (CAS 39515-40-7)
EC50/48 h 0.00043 mg/l (water flea (daphnia magna))
LC50/96 h 0.00037 mg/l (rainbow trout (oncorhynchus mykiss))

General notes:
Do not allow product to reach ground water, water course or sewage system

12.2 persistance and degradability

No further data available

12.3 Bioaccumulative potential

No further data available

12.4 Mobility in soil

No further data available

12.5 Results of PBT and vPvB assessment

No further data available

12.6 Other adverse effects

No further data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.Hand over to disposers of hazardous waste.

Disposal of soiled packaging
Do not reuse empty contaminated packaging for other purposes; dispose according to official regulations.

14. Transport information

14.1 UN number

ADR, IMDG UN3077
IATA UN1910

14.2 Un proper shipping name

Environmentally hazardous substance, solid, n.o.s. (cyphenothrin)
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MARINE POLLUTANT
CALCIUM OXIDE

14.3 Transport hazard class

ADR, IMDG



Class 9 (M7) Miscellaneous dangerous substances and articles.

IATA



Class 8 Corrosive substances

14.4 packing group

III

14.5 Environmental hazards

Symbol (fish and tree)

14.6 Special precaution for user

Warning: Miscellaneous dangerous substances and articles.
Kemler Number: 90
EMS Number: F-A,S-F

14.7 transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Other informations :
ADR additional informations
Excepted quantities (EQ): E1
· **Limited quantities (LQ):** 5 kg
· **Transport category:** 2
· **Tunnel restriction code:** D

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation for the mixture

This formulation is beyond the scope of Regulation (EC) No 2037/2000 of European Parliament and the Council of 29 June 2000 on substances that deplete the ozone layer.
This formulation is beyond the scope of Regulation (EC) No 850/2004 of the European Parliament and the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.
This formulation is beyond the scope of Regulation (EC) No 689/2008 of the European Parliament and the Council of 17 June 2008 concerning the export and import of dangerous chemicals.
This formulation is not subject to special provisions for the protection of human health or the environment at Community level.
Quantity limits according to "EC Seveso directive" should be observed.

15.2 Chemical safety assessment

No chemical safety assessment available

16. OTHER INFORMATIONS

R-phrases and H-phrases paragraph 3

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

R2 Risk of explosion by shock, friction, fire or other sources of ignition.
R20/22 Harmful by inhalation and if swallowed.
R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.
R42 May cause sensitisation by inhalation.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:
CAS: Chemical Abstracts Service (division of the American Chemical Society)
EINECS: European Inventory of Existing Commercial Chemical Substances
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CLP: REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the
International Carriage of Dangerous Goods by Road)

Updates:
This document differs from the previous version in the following areas:
- Section 2 : CLP classification corrected
- Section 1: Update information on emergency call

Also refer to technical instructions for use.

The data contained in this material safety data sheet are based on the current level of scientific and technical knowledge in this domain and at the date of the last update and are given bona fide.
These data cannot be used to confirm the product properties and do not constitute a legal or a contractual covenant. These data shall not be used as an order basis.
This sheet completes the technical data but do not replace them.
The user bears full responsibility for knowing and applying the legal texts, the handling procedures and the safety measures linked to the product use.
The entirety of the regulatory and legal prescriptions mentioned can only be used as a support to help the user fulfilling his duty in the use of the aforementioned product.
It is advised to consult the national or international measures that can apply because the measures contained in this sheet should not be considered to be exhaustive.
This document does not exempt the user to make sure that others obligations devolve upon himself inparticular regarding to product's possession, use or specification and for which he is fully responsible.