

## Safety Data Sheet

### Pheromone for *Sitophilus granarius*



Safety Data Sheet dated 9/10/2018, version 1

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

##### 1.1. Product identifier

Mixture identification:

Trade name: Pheromone for *Sitophilus granarius*

Trade code: P-01005

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

Recommended use:

Pheromone dispensers for *Sitophilus granarius*, for use inside monitoring devices to detect the presence of these pests.

Uses advised against:

The mixture has to be used for the mentioned application and use.

##### 1.3. Details of the supplier of the safety data sheet

Company:

GEA SRL

Via E. Fermi, 10

20019 - Settimo Milanese (MI) - ITALIA

Tel: +39 02 33514890

Fax: +39 02 00665233

Competent person responsible for the safety data sheet:

msds@geaitaly.it

##### 1.4. Emergency telephone number

Milan Poison Control Centre + 39 02 66101029 (CAV Ospedale Niguarda Ca` Granda - Milan)

Pavia Poison Control Centre + 39 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)

Bergamo Poison Control Centre + 39 800 883300 (CAV Ospedali Riuniti - Bergamo)

Florence Poison Control Centre + 39 055 7947819 (CAV Ospedale Careggi - Florence)

Rome Poison Control Centre + 39 06 3054343 (CAV Policlinico Gemelli - Rome)

Rome Poison Control Centre + 39 06 49978000 (CAV Policlinico Umberto I - Rome)

Naples Poison Control Centre +39 081 7472870 (CAV Ospedale Cardarelli — Naples)

Company emergency telephone number: +39 02 33514890 (available from Monday to Friday from 9 a.m. to 6 p.m., for technical assistance only).

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

##### 2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None



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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
>= 0.1% - < 0.25%	cyclohexane	Index 601-017-00-1 number: CAS: 110-82-7 EC: 203-806-2	2.6/2 Flam. Liq. 2 H225 3.10/1 Asp. Tox. 1 H304 3.2/2 Skin Irrit. 2 H315 3.8/3 STOT SE 3 H336 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

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 under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

water haze

foam

powder

carbon dioxide



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Extinguishing media which must not be used for safety reasons:  
high pressure water jets.

#### 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.

Remove persons to safety.

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

## SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

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 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

cyclohexane - CAS: 110-82-7

- OEL Type: IOELV - TWA: 700 mg/m<sup>3</sup>, 200 ppm

DNEL Exposure Limit Values

cyclohexane - CAS: 110-82-7

Worker Industry: 2016 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

Worker Industry: 1400 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects



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Worker Industry: 700 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Industry: 700 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

#### PNEC Exposure Limit Values

cyclohexane - CAS: 110-82-7

Target: Fresh Water - Value: 0.207 mg/l

Target: Freshwater sediments - Value: 16.68 mg/kg

Target: Marine water - Value: 0.207 mg/l

Target: Marine water sediments - Value: 16.68 mg/l

Target: STP - Value: 3.24 mg/l

Target: Soil - Value: 3.38 mg/kg

#### 8.2. Exposure controls

Eye protection:

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

Protection for skin:

Avoid contact with the skin.

Protection for hands:

Wear protective gloves.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

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 and green. Natural rubber dispenser.	--	--
Odour:	Sui generis	--	--
Odour threshold:	N.A.	--	--
pH:	N.A.	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	N.A.	--	--
Solubility in water:		--	--
Solubility in oil:		--	--



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Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

#### 9.2. Other information

Properties	Value	Method:	Notes
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

## 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

Ciclohexane: may react violently with oxygenated (oxidizing) material. Explosion hazard.

### 10.4. Conditions to avoid

Ciclohexane: heat, flame and spark.

### 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:

Pheromone for *Sitophilus granarius*

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

Not classified

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation

Not classified

Based on available data, the classification criteria are not met

e) germ cell mutagenicity

Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity



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Not classified  
Based on available data, the classification criteria are not met

g) reproductive toxicity  
Not classified  
Based on available data, the classification criteria are not met

h) STOT-single exposure  
Not classified  
Based on available data, the classification criteria are not met

i) STOT-repeated exposure  
Not classified  
Based on available data, the classification criteria are not met

j) aspiration hazard  
Not classified  
Based on available data, the classification criteria are not met

Toxicological information of the main substances found in the product:

Cyclohexane - CAS: 110-82-7  
acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat = 12705 mg/kg  
skin corrosion/irritation:  
It may cause skin irritation.  
ingestion:  
Ingestion may be harmful.  
inhalation:  
Inhalation may be harmful. Cyclohexane may cause airway irritation.  
subacute and chronic toxicity:  
Damage to central nervous system in case of prolonged exposure.  
STOT-single exposure:  
It may cause sleepiness or dizziness.  
aspiration hazard:  
It may be fatal in case of ingestion and penetration into the respiratory system.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

Pheromone for *Sitophilus granarius*

Not classified for environmental hazards

Based on available data, the classification criteria are not met

cyclohexane - CAS: 110-82-7

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 0.9 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 4.53 mg/l - Duration h: 48

### 12.2. Persistence and degradability

N.A.

### 12.3. Bioaccumulative potential

N.A.

cyclohexane - CAS: 110-82-7

BOD35/ThOD=67%

### 12.4. Mobility in soil

N.A.

cyclohexane - CAS: 110-82-7

very toxic for the fish.

### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None



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#### 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

Not classified as dangerous in the meaning of transport regulations.

#### 14.2. UN proper shipping name

N.A.

#### 14.3. Transport hazard class(es)

N.A.

#### 14.4. Packing group

N.A.

#### 14.5. Environmental hazards

N.A.

#### 14.6. Special precautions for user

N.A.

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

### SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) 2015/830  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
Regulation (EU) n. 2016/918 (ATP 8 CLP)  
Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 40

Restrictions related to the substances contained:

Restriction 57

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)





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Provisions related to directive EU 2012/18 (Seveso III):

N.A.

#### 15.2. Chemical safety assessment

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

Substances for which a Chemical Safety Assessment has been carried out:  
cyclohexane

#### SECTION 16: Other information

Paragraphs modified from the previous revision: 8, 10, 11, 12 and 15.

Full text of phrases referred to in Section 3:

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1

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

The information contained herein is based on our state of knowledge at the above-specified date. 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.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of  
Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of  
Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport  
Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"





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	(ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.