

SAFETY DATA SHEET

Safety data sheet for chemical products according to EC-directive 2001/58/EC
Issued: June 29, 1995 ó Revised: January 22, 2008 Page 6/1

SPRITEX Pyrethrin 12/30

1. Chemical product and company identification

- Trade name : Spritex Pyrethrin 12/30
Intended use : Solely permitted to use for pest control in storage-,
business- and dwelling accommodations.
Supplier : Denka International B.V.
Hanzeweg 1
3771 NG Barneveld
The Netherlands
telephone +31.342.455455
telefax +31.342.490587
Emergencies : In case of emergency contact the nearest toxicological
information institute. Physicians only.

2. Composition - information on ingredients

Ingredient	EC-no.	CAS-no.	Symbol	R-phrases*	Content
					%
Distillates, hydro-treated light petroleum	265-149-8	64742-47-8	Xn	65, 66	>50
Piperonylbutoxide	200-076-7	51-03-6	N	50/53	4
Pyrethrum	232-319-8	8003-34-7	Xn, N	20/21/22, 50/53	0.4

*R-phrases are explained in section 16 hereof.

3. Hazard identification

- Hazards to human health : Harmful by inhalation. May cause lung damage if
swallowed. By swallowing and consecutive vomiting,
product may get into the lungs, which may lead to
suffocation or chemical pneumonia. Repeated exposure
may cause skin dryness or cracking.
Safety hazards : In use, may form flammable/explosive vapour/air mixture.
Environmental hazards : Marine pollutant. Highly toxic to aquatic organisms; may
cause long term adverse effects in the aquatic
environment.

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4. First aid measures

- Emergencies : If swallowed seek immediate medical attention.
- Inhalation : Remove person from exposure area to fresh air and calm down.
Get medical attention.
- Eye contact : Flush eyes with copious quantities of water.
Seek medical advice if irritation occurs.
- Skin contact : Remove contaminated clothing and thoroughly wash skin with soap and water.
Seek medical advice if irritation occurs.
- Ingestion : Get immediate medical attention. Do not induce vomiting.
If vomiting occurs, keep head below hips to prevent aspiration.
- Information for physician : Treatment is symptomatic and supportive.
No specific antidote known.

5. Fire fighting measures

- Suited extinguishing media : Universal foam, water spray, CO₂ or powder.
- Unsuited extinguishing media : Water jet.
- Exposure risks : By incomplete combustion carbon monoxide may form.
- Special protective equipment for fire fighters : Self-contained respiratory apparatus and protective clothing must be worn.

6. Accidental release measures

- Personal precautions : Isolate spill area and deny entrance to unnecessary people.
Prevent contact with skin and eyes and prevent inhalation.
Prevent ignition by open fire or static discharge. Wear protective clothing, gloves and respiratory protection.
- Environmental precautions : Highly toxic to aquatic organisms. Prevent contamination of soil or water. Do not allow entry in streams, sewers or natural environment. Dike flow of spilled material using soil or other suitable absorbent.
- Methods for cleaning up : Do not touch spilled material. Take up with sand or other absorbent material and place into clean, dry, labelled containers, for later disposal in compliance with local authority regulations.
Ventilate closed areas before re-entering.

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7. Handling and storage

- Handling precautions : Standard directives for handling chemicals must be strictly observed. Protective clothing, gloves and should be provided for all handling. Eating, drinking and smoking should be prohibited during handling and before washing after handling.
- Storage : Product must be stored in unopened, original containers, safe from access by unauthorized persons and children. Store away from food, drink and animal feeding stuffs. Store upright in a dry, frost proof place. Warehouse must be suitable for storage of pesticides. Mechanical ventilation is recommended.
- Shelf life : Two years from date of production if correctly stored.
- Classification : Flammable liquid K3.

8. Exposure control - personal protection

- Statutory limit : No data available.
- Ventilation : Ventilate treated areas before re-entering.
- Respiratory protection : Wear respiratory equipment (combi-mask A2-P2).
- Hand protection : Protective gloves (latex) are necessary.
- Eye protection : Safety glasses or goggles are recommended.
- Body protection : Protective clothing is necessary.
- Others : Do not eat, drink or smoke. Do not use in areas where humans or pets are present. Do not light any pilot lights or spiral filaments.

9. Physical and chemical properties

- Appearance : pale yellow liquid
- Odour : mild chemical
- Density at 20°C : 0.797 g/ml
- Vapour pressure at 20°C : 60 Pa (estimation based on solvent properties)
- Boiling range : 193-245°C (estimation based on solvent properties)
- Flash point : 73°C (estimation based on solvent properties)
- Auto-ignition : 236°C (estimation based on solvent properties)
- Explosion limits : LEL = 0.6% v/v, UEL = 5.5% v/v (estimation based on solvent properties)
- Partition coefficient : $\log P_{ow}$ pyrethrin I = 5.9 pyrethrin II = 4.3
- pH : not applicable
- Oxidizing properties : non-oxidizing
- Viscosity : 2.8 mPa.s at 20°C (Brookfield spindle 1)
- Solubility in water : insoluble
- Solubility in solvents : soluble in most organic solvents

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10. Stability and reactivity

- Stability : Product is stable under normal conditions.
- Compatibility : In general compatible with other insecticides and fungicides in non-alkaline media.
- Conditions to avoid : Excessive heat, open fire and sparks, wet conditions.
- Materials to avoid : Strong acids and bases.
- Hazardous decomposition products : During fire carbon monoxide.
- Hazardous polymerization : Will not occur.

11. Toxicological information

- Toxicological family : Pyrethrins.
- Acute toxicity to mammals : LD(product, oral, rat)₅₀ > 2000 mg/kg.
LD(product, dermal, rat)₅₀ > 2000 mg/kg.
LD(product, oral, mouse)₅₀ > 2000 mg/kg.
LD(product, 4h inhalation, rat)₅₀ = 2.5 mg/m³.
- Toxicity to human beings : Harmful by inhalation. May cause lung damage if swallowed. By swallowing and consecutive vomiting, product may get into the lungs, which may lead to suffocation or chemical pneumonia.
- Chronic toxicity : According to present knowledge non-carcinogenic, non-mutagenic, non-teratogenic.

12. Ecological information

- Environmental toxicity : Marine pollutant. Highly toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.
- Environmental properties : Biodegradable.

13. Disposal consideration

- Waste from residues and contaminated packaging : In compliance with national/local authority regulations for disposal of chemical waste.

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14. Transport information

International regulations	
Obligatory description	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., solution of 4% piperonylbutoxide and 4% pyrethrum, 9, III
Obligatory labelling	: Land ó RID/ADR : 9 Inland waterways ó ADNR : 9 + MP Sea ó IMDG : 9 + MP Air ó ICAO-II, IATA-DGR : 9
Transport emergency group card	: 90GM6-III

15. Regulatory information

Regulations for labelling*	
Approval number	: 8353 N (The Netherlands)
Symbols	: Xn Harmful. N Dangerous for the environment.
Hazard indications (R-phrases)	: R18 In use, may form flammable/explosive vapour/air mixture. R20 Harmful by inhalation. R50/53 Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause long damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking.
Safety precautions (S-phrases)	: S23 Do not breathe spray. S24 Avoid contact with skin. S38 In case of insufficient ventilation, wear suitable respiratory equipment. S60 This material and its package must be disposed of as hazardous waste. S61 Avoid release to the environment. Refer to special instructions/safety data sheet. S62 If swallowed, do not induce vomiting; seek medical advice immediately and show container or label.
Additional information	: Do not use in areas accessible to children of 0-4 years. Ventilate thoroughly before entering treated rooms again.

* labelling according to classification of Ctgb dated 4th December 2007

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16. Other information

- Explanation R-phrases section 2 :
- | | |
|-----------|--|
| R20/21/22 | Harmful by inhalation, in contact with skin and if swallowed. |
| R50/53 | Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment. |
| R65 | Harmful: may cause long damage if swallowed. |
| R66 | Repeated exposure may cause skin dryness or cracking. |
- Information sources : -N-class data base of the ECB.
Ctgb (Board for the Authorisation of Plant Protection Products and Biocides, NL).
Safety data sheets of components.
- Alterations in relation to edition of 9th January 2008 : § 15: Labelling adjusted to classification by Ctgb dated 4th December 2007.

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within this safety data sheet since the customer's treatment of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.