

Material Safety Data sheet according to 91/155/EG

1. Product and Name of Manufacturer

Trade Name of Product: **STICHFREI Insect Repellent, liquid and aerosol**

Manufacturer: F.W. Klever GmbH, Hauptstraße 20, D-84168 Aham, Germany

Informations: Telefon / Telephone 0049- (0)8744 – 96 99 0

In case of emergency: 0049- (0)8744 – 96 99 0

2. Informations about the composition:

Chemische Charakterisierung: Insect Repellent against mosquitoes, flies etc.

Hazardous Ingredients: Solvent 2-Propanol CAS Nr. 67-63-0 25,0 %

Propellant in aerosol propane-butane (CAS-No. 74-98-6 and 106-97-8) 15%

Additional informations: -

3. Potential Hazards

Descriptions of the Risks: R12 extremely flammable in contact with open fire.

Security Risks: Bursting of the can when heated above 50°C.

Environmental Risks: none

4. First Aid

General Informations:

After Inhalation: Expose to fresh air

After Eye Contact: rinse with water

After Skin Contact: -

Informations for the Physician: none

5. Actions for Fire Fighting

Suitable Fire Distinguishers: Powder, foam, carbon dioxide.

Unsuited Equipment: water

Extraordinary Danger by Combustion Products: none

Particular Protection Equipment for Fire Fighting: not necessary

6. Precautions when released involuntarily:

Personel Precautions: Do not inhale vapours.

Environmental Actions: none

Instructions for Cleaning / Absorption: no special instructions necessary

Additional Hints: none

7. Handling and Storage:

Handling:

Instructions for secure Working: Do not eat, drink or smoke during application. Apply only in well ventilated areas.

Instructions against Fire and explosion: Keep out of range of open fire and hot places. Store in well ventilated rooms.

Storage:

Specifications for stockholding and containers:

Storage with other products: Do not store together with highly flammable liquids.

Further informations about Conditions of Storage: none

Classification of Storage: --

Materials suited for Storage: Only original containers.

8. Limitation of Exposition and personel protection:

Additional hints for technical equipment: none

Maximum concentration per workshop place: no limitation

Additional Informations: none

Personel Equipment:

Gas mask: not necessary

Gloves: not necessary

Eye Protection: not necessary

Protective Clothes: not necessary

General Protections and hygienic Instructions: Change contaminated clothes.

9. Physical and Chemical Properties:

Phenotype Aerosole

Status: Aerosol packing Colour: not applicable

Security relevant datas:

pH-Value not applicable

Change of State:

Pourpoint DIN ISO 3016 : not applicable

Flashpoint DIN ISO 2592 /: not applicable

Vapour pressure 20°C /: 3,5 bar inner pressure
Density 20°C /: not applicable
Solubility in Water 20°C /: not applicable
Distribution coefficient n-Octanole/Water: not applicable
Kinematic viscosity 20°C /: not applicable

10. Stability and reactivity

Avoidable Conditions: none when used as directed
Avoid Contact with: none
Dangerous decomposition products: none under normal conditions
Additional Informations: none

11. Toxicological Information

2-Propanole oral, rat: 5045 mg/kg No cancerogenic, mutagenic nor No skin-sensitizing effect (guinea pig).
inhalation: 46,5 mg/l teratogenic effect in animal experi-
dermal, rabbit: 12.800 mg/kg ments.
Ames-Test: negativ
Salmonella typhimurium: negativ
Micronucleus test: negativ

12. Angaben zur Ökologie / Ecological Datas

Elimination and degradability:
Behaviour in environmental compartments: biodegradation of active ingredients, complete photoxidation of solvent and propellent.
Ecotoxic Action: none when used as directed
Additional ecological datas: none

13. Treatment of waste:

Product:
Waste classification No. (EU) 20 01 22
Uncleaned containers:
Recomendations: empty completely
Recomended cleaning material: not applicable

14. Instructions for transportation

Road: Aerosol: Transportation according to Rn. 2201a Classification: Aerosols
(maximum 30kg/box) „limited quantity“
Railway: Aerosol: Transportation according to Rn. 2201a Classification: Aerosols
(maximum 45 l /box) „limited quantity“
Sea: Aerosol: Dangerous Goods Classification UN-Nr. 1950 / Class 2 / Packing Group EmS-No. 2-13
Air: Aerosol: Dangerous Goods Classification UN-Nr. 1950 / Class 2.1 / Packing Group 203

15. General Instructions

Typification according to EU-Rules: R 12: extremely inflammable; S 16: Keep away from open fire, do not smoke.
National Instructions Symbol F+ ; Do not expose to bright sun and tempratures above 50°C. Do not puncture or expose to fire. Do not spray against flames or glowing objects. Keep away from igniting objects, do not smoke. Must not be kept in reach of children.
Restrictions of employment: none
Failure regulation act: none
Classification combustible liquids regulation: not applicable
Technical instruction air: none
Waterhazardous Classification: not applicable
Other instructions, restrictions and prohibitions: none

16. Other informations

Issued by: Department laboratory / documentation

Last revision: January 2002 Replaces Edition: May 2001