

פיתוח, ייצור, ייעוץ, ושיווק פתרונות הדברה מתקדמים
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MATERIAL SAFETY DATA SHEET
PRODUCT NAME: DIFON 100

ISSUE 01

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JANUARY 2018

1 PRODUCT AND COMPANY IDENTIFICATION:

- 1.1 PRODUCT IDENTIFIER: DIFON 100 - Rodenticide in aerosol foam
- 1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISE AGAINST:
- Use of the substance: rodenticide
Recommended restrictions on use: for professional use only
- 1.3 MANUFACTURER:
SASA TECH AGRICULTURE COOPERATIVE ASSOCIATION LTD.
KIBUTZ SASA - MOBILE POST MEROM HAGALIL (1387000) ISRAEL
TEL. 04-6987720, FAX. 04-6987871
- 1.4 MARKETING: R.P.C. LTD. MOSHAV NES HARIM. P.O.BOX 128 – 9988500
- 1.5 EMERGENCY PHONE: 1-700-500-405

2 HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture
- Classification in accordance with regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended
- Flammable aerosols: Category 1
H222 Extremely flammable aerosol.
H229 Pressurized container: May burst if heated.
H302 Harmful if swallowed
- Classification according to EU Directives 67/548/EEC or 1999/45/EC.
- R12
T Toxic, R22
Xn Harmful, R21/22
- 2.2 Label elements
- Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.
Hazard label for supply/use required.
Hazardous components, which must be listed on the label: Difenacoum



Signal word: Danger

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurized container: May burst if heated.

H302 harmful if swallowed

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P260 Do not breathe spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50

°C/ 122 °F. P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers, which can be disposed of as non-hazardous waste.

2.3 Other hazards

Because of antivitamin K properties of the active ingredient, absorption can inhibit blood coagulation and cause haemorrhagic syndrome.

2.4 Label elements

Labelling in accordance to EU Directives 67/548/EEC or 1999/45/EC on classification, labelling and packaging of substances and mixtures, as amended.

Symbol (s):



flammable
قابل للاشتعال
דליק



Irritant
מادة مهيجة
חומר מגרה



Dangerous to the Environment
ضار بالبيئة
מזיק לסביבה



Poison
سام
רעל

Hazardous component that must be listed on the label:
Difenacoum

R- PHRASES:

R12: Extremely flammable.
R21/22 Harmful by contact with skin and if swallowed

S- PHRASES:

S2: Keep out of reach of children
S13: Keep away from food. Drink and animal feeding stuffs
S15: Keep away from heat
S16: Keep away from sources of ignition – No smoking.
S20/21: When using does not eat, drink or smoke.
S23: Do not breathe spray.
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse with plenty of water and seek medical advice.
S28: After contact with skin, wash with a plenty of soap and water.
S29: Do not empty into drains.
S45: In case of accident or if you feel unwell, seek medical advice (show the label or can where possible)
S51: Use only well-ventilated areas.

Special labeling:

Use only as directed. Only for professional use.
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

3 COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substance: None

3.2 Mixtures

Chemical nature: Aerosol dispenses (AE) Difenacoum 0.5%



Hazardous components
 R-phrase(s) according to EC directive 67/548/EEC
 Hazard statements according to Regulation (EC) No. 1907/2006

CHEMICAL NAME	CAS No. EINECS No	Classif. EC 67/548/ECC	Regul. (EC) No. 1272/2008	Conc. %
Butane/Propane (LPG propellant)	68476-85-7 270-704-2	F+, R12	Press. Gas Flam. Gas1, H220	>= 30.00 - < 55.00
Difenacoum	56073-0705 259-978-4	T+; R28 T; R48/25 N; R50/53	Acute Tox. 2; H300 STOT; H372 WATER AC. TOX. 1; H400 WATER CH. TOX. H410	0.500
Denatonium Benzoate	3734-33-6	Xn, R22, R36/37/38	Acute oral, 4 H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT 3, H335	0.001

4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice Move out of dangerous area. Remove contaminated clothing immediately and dispose of safely. Place and transport victim in stable position (lying sideways). In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.

Skin contact: Wash off thoroughly with plenty of soap and water, subsequently rinse with water. Take off contaminated clothing and shoes immediately. Call a physician or poison control center immediately.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.



Ingestion: Rinse mouth. Induce vomiting only, if: 1. patient is fully conscious, 2. medical aid is not readily available, 3. a significant amount (more than a mouthful) has been ingested and 4. time since ingestion is less than 1 hour. (Vomit should not get into the respiratory tract.) Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: if large amounts are ingested, the following symptoms may occur: State of shock, Nose bleeding, bloody vomiting, abdominal pain, and Back pain. Symptoms and hazards refer to effects observed after intake of significant amounts of the active ingredient(s).

Treatment: Treat symptomatically. Antidote: Vitamine K1. Cases of severe poisoning may require the usual measures like application of blood products or transfusions. In case of ingestion, gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.

5 FIRE – FIGHTING MEASURES

Suitable extinguishing	Use extinguishing measures that are appropriate to local media: circumstances and the surrounding environment.
Specific hazards during fire fighting:	In case of fire and/or explosion do not breathe fumes. Exposure to decomposition products may be a hazard to health. Heating may cause an explosion.
Special protective	Refer to current standard as appropriate. Wear suitable
Equipment for fire-fighters:	protective clothing and gloves. In event of fire, wear self-contained breathing apparatus.
Further information:	Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed in accordance with local regulations.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment. Remove all sources of ignition.
Environmental precautions: Do not allow to get into surface water, drains and ground water. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency



Methods for cleaning up: Use mechanical handling equipment. Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal. Keep unauthorized people away.

7 HANDLING AND STORAGE

Handling

Advice on safe handling: No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation.

The product is extremely flammable. Keep away from heat and sources of ignition. Take measures to prevent the buildup of electrostatic charge. Fire or intense heat may cause violent rupture of packages.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

Storage

Storage conditions: BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Do not spray on flames or red-hot objects. No smoking. Store in cool place. Keep out of reach of children.

Storage stability: No decomposition if stored and applied as directed.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS No.	mg/m ³	ppm	List
L.P.G	68476-85-7	1,810	750	UK_WELSTEL
		1,450	600	UK_WELTWAS

Personal protective equipment

Hand protection: Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet. Before removing gloves, clean them with soap and water.

Eye protection: Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).



Skin and body protection: Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

Respiratory protection Respiratory protection is not required under anticipated circumstances of exposure.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form: Aerosol
Colour: dark blue
Odour: characteristic

Safety data:

Flash point: $< -7^{\circ}\text{C}$
Flammability: sustains combustions

10 STABILITY AND REACTIVITY

Conditions to avoid: Heat, flames and sparks.
Material to avoid: None.
Hazardous decomposition products: Stable under normal conditions.
Hazardous reactions: None known.

11 TOXICOLOGICAL INFORMATION

Acute oral toxicity: LD_{50} calculated > 2000 mg/kg.
Acute dermal toxicity: LD_{50} calculated > 10.000 mg/kg.
Acute inhalation toxicity: LC_{50} calculated > 20 mg/liter.
Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal. Excessive exposure to spray mist, for or vapour can cause respiratory irritation.
Skin irritation: May cause skin irritation in susceptible persons.
Eye irritation: May irritate eyes.



Assessment repeated dose toxicity

Difenacoum caused inhibition of blood coagulation possibly causing hemorrhagic syndrome in animal studies. The toxic effects of Difenacoum are related to antivitamin K properties. Assessment Mutagenicity: Difenacoum was not mutagenic or genotoxic in a battery of in vitro and in vivo test.

Assessment Carcinogenicity: Difenacoum is not considered carcinogenic.

Assessment toxicity to reproduction: Difenacoum is not considered a reproductive toxicant at non-maternally toxic dose levels.

12 ECOLOGICAL INFORMATION

Toxic effects on fish, plankton and other organisms. Limited risk for the waters.

Toxicity: Fishes*: At the dosage of 10 mg/l, during the 96 hours of observation, no symptom of toxicity has appeared and no death has occurred (Report n. 95/11601 BIOLAB). -Algae*: At the dosage of 10 mg/l there is no difference in the growing of the algae (Report n. 95/11600 BIOLAB)

Daphnia*: CI50 is > a 10 mg/l (Report n. 95/11599 BIOLAB)

*reports refer to "Concentrate 0,25%"

Ecotoxicity technical Difenacoum: LC 50 Rainbow trout 0,10 mg/l (rif. Directive 2006/8/CE Persistence and degradability Active principles is poorly degradable.

Bioaccumulative potential : Active principle has Log Pow> 3,3 (Study CH-14/96-B Chemservice)

Mobility in soil: Absorption coefficient of the active ingredient is $K_{oc} > 398$; classification : immobile (Technical Report N° 1 14/07/1997 Chemservice)

13 DISPOSAL CONSIDERATION

Product: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Disposal should be in accordance with local, state or national legislation.

14 TRANSPORT INFORMATION:

LAND TRANSPORT:

ADR:

UN-NUMBER: 1950

Class: 2

ADR/RID-Labels 2.2

Packaging group

Proper shipping name: UN1950 AEROSOLS, asphixiant, 2.2



SEA TRANSPORT

IMDG

UN-NUMBER: 1950

Class: 2

Packaging group

ADR/RID-Labels 2

Proper shipping name: UN1950 AEROSOLS, asphixiant, 2.2

EmS F – D, S – U

Marine pollutant

Air transport

Refer to IATA.ICAO Dangerous Goods Regulations for detailed instructions when shipping this item by air.

15 REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS: According to the Regulation (EU) No. 1272/2008

Further information

WHO-classification: III (Slightly hazardous)

Chemical Safety Assessment: A chemical safety assessment is not required.

16 OTHER INFORMATION

THE MINISTRY OF ENVIRONMENT PROTECTION DETERMINED THAT THE USAGE OF THIS PRODUCT/ SUBSTANCE IN CONTRADICTION TO THE ENCLOSED INSTRUCTION MAY ENDANGER THE ENVIRONMENT AND PUBLIC HEALTH AND IS AGAINST THE LAW.

The above information is intended to give general health and safety guidance on the storage and transport of the product. It is not intended to apply to the use of the product for which purposes the product label, any appropriate technical usage literature available should be consulted, and any relevant licenses, consents or approvals complied with. The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

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SIGNED: TRIGUBOFF BERNARDO

TECHNICAL, CHEMICAL & REGULATORY CONSULTANT