

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

1.1. Product identifier

Product form : Mixture
 Name : SHARK
 Product code : 6246

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Herbicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

FMC CHEMICAL Sprl
 Boulevard de la Plaine, 9/3
 1050 BRUXELLES - BELGIQUE
 T 00 32 2 6459584 - F 00 32 2 6459655
msdsinfo@fmc.com

1.4. Emergency telephone number

Emergency number : 00 32 14 58 45 45 (all countries)

| Country | Organisation/Company | Address | Emergency number |
|-----------------|--|---|---|
| BELGIUM | Centre Anti-Poisons/Antigifcentrum c/o Hôpital Central de la Base - Reine Astrid | Rue Bruyn B - 1120 Brussels | +32 70 245 245 |
| BULGARIA | National Toxicological Information Centre National Clinical Toxicology Centre, Emergency Medical Institute "Pirogov" | 21 Totleben Boulevard 1606 SOFIA | +359 2 9154 409 |
| ČESKÁ REPUBLIKA | Toxikologické informační středisko | Na Bojišti 1 120 00 Praha 2 | +420 224 919 293 +420 224 915 402 |
| DANMARK | Giftlinjen Bispebjerg Hospital | Bispebjerg Bakke 23, 60, 1 DK-2400 Copenhagen NV | +45 82 12 12 12 |
| FRANCE | ORFILA | http://www.centres-antipoison.net | +33 (0)1 45 42 59 59 |
| GERMANY | Berliner Betrieb für Zentrale Gesundheitliche Aufgaben Institut für Toxikologie, Klinische Toxikologie und Giftnotruf Berlin | Oranienburger Strasse 285 13437 Berlin | +49 30 19240 |
| HUNGARY | Országos Kémiai Biztonsági Intézet (National Institute of Chemical Safety) Egészségügyi Toxikológiai Tájékoztató Szolgálat (Health Toxicological Information Service) | 1437 Budapest PO Box 839 1097 Budapest, Nagyvárad tér 2 | +36 80 20 11 99 |
| ITALY | Centro Antiveneni Ospedale Niguarda Ca' Granda | Piazza Ospedale Maggiore 3 20162 Milano | +39 02 6610 1029 |
| LITHUANIA | Poisons Control and Information Bureau | Siltnamiu 29 2043 Vilnius | +370 523 62052 +370 687 53378 |
| NEDERLAND | Nationaal Vergiftigen Informatie Centrum (Uitsluitend bestemd omartsen te informeren bij accidentele vergiftigen) | Heidelberglaan 100 3584 CX Utrecht | +31 30 274 88 88 |
| NORWAY | Giftinformasjonen Directorate of Health and Social Affairs | P.O. Box 7000 St. Olavs Plass 130 Oslo | +47 22 591300 |
| POLAND | Warsaw Poison Control and Information Centre Praski Hospital | Al. Solidarnosci 67 P-03 401 Warszawa | +48 22 619 66 54 +48 22 619 08 97 |
| PORTUGAL | Centro de Informação Antivenenos – Dra Arlinda Borges Instituto Nacional de Emergência Médica (INEM) | Rua Almirante Barroso, 36 1000-013 Lisboa | 808 250 143 (for use only in Portugal), +351 21 330 3284 |
| ROMANIA | Institutul National de Sanatate Publica | Str. Dr. Leonte Anastasievici Nr.1-3, Sector 5 Bucuresti, directie.generala {at} insp.gov.ro 050463 Bucuresti | +40 21318 3606 |
| SLOVAKIA | National Toxicological Information Centre University Hospital Bratislava | Limbová 5 833 05 Bratislava | +421 2 54 77 4 166 |
| SLOVENIA | Poison Centre Division of Internal Medicine | University Clinical Centre Zaloska 7 1525 Ljubljana | + 386 41 650 500 |
| SPAIN | Servicio de Información Toxicológica Instituto Nacional de Toxicología, Departamento de Madrid | Calle Luis Cabrera 9 E-28002 Madrid | +34 91 562 04 20 |

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| Country | Organisation/Company | Address | Emergency number |
|----------------|--|--|--|
| SUOMI | Myrkytystietokeskus | P.O.B 790 (Tukholmankatu 17) HUS SF - 00029 Helsinki | +358 9 471 977 |
| SWEDEN | Giftinformationscentralen Swedish Poisons Information Centre, Karolinska Hospital | Box 60 500 SE-171 76 Stockholm | 08-331231 (Måndag-Fredag; 9.00-17.00) 112 (0.00-24.00) |
| UNITED KINGDOM | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH Birmingham | 0870 600 6266 (UK only) |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Sens. 1 H317

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

R43

N; R50/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS07

GHS09

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H317 - May cause an allergic skin reaction
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP)

: P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
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

EUH phrases : EUH401 - To avoid risks to human health and the environment, comply with the instructions for use

EUH phrases

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | Classification according to Directive 67/548/EEC | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--------------------------------|--|------|--|---|
| Carfentrazone-ethyl | (CAS No) 128639-02-1 (EC index no) 607-309-00-5 | < 10 | N; R50/53 | Aquatic Acute 1, H400 Aquatic Chronic 1, H410 |
| Polyether modified trisiloxane | (CAS No) 134180-76-0 | < 5 | Xn; R20/21 Xi; R36 N; R51/53 | Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 |

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| Name | Product identifier | % | Classification according to Directive 67/548/EEC | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|-----|--|--|
| Solvent naphtha (petroleum), light arom. | (CAS No) 64742-95-6 (EC no) 265-199-0 (REACH-no) 01-2119455851-35 | < 5 | R10 Xn; R65 R66 R67 Xi; R37 N; R51/53 | Flam. Liq. 3, H226 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 |
| Calcium dodecylbenzenesulphonate | (CAS No) 26264-06-2 (EC no) 247-557-8 | < 5 | Xi; R38 Xi; R41 | Skin Irrit. 2, H315 Eye Dam. 1, H318 |
| butan-1-ol | (CAS No) 71-36-3 (EC no) 200-751-6 (EC index no) 603-004-00-6 (REACH-no) 01-2119484630-38 | < 5 | R10 Xn; R22 Xi; R41 Xi; R37/38 R67 | Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 |

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Move the affected person to the fresh air
If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Remove all contaminated clothing and footwear
Wash with soapy water
If case of redness or irritation, call a doctor.
- First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum)
If irritation persists, consult an eye specialist.
- First-aid measures after ingestion : Rinse mouth out with water
Never attempt to induce vomiting
Take medical advice immediately.

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

- Symptoms/injuries after skin contact : Irritation
Exposure may produce an allergic reaction.

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

Treat symptomatically and supportively in response to reactions of patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Powder
Foam
Carbon dioxide (CO₂).
- Unsuitable extinguishing media : Water (the product is dangerous for the environment - do not dilute it).

5.2. Special hazards arising from the substance or mixture

- Fire hazard : During combustion :
Toxic vapours may be released.

5.3. Advice for firefighters

- Firefighting instructions : Isolate fire area. Evacuate downwind
Do not breathe fumes
Contain the extinguishing fluids by bunding (the product is hazardous for the environment).
- Protection during firefighting : Do not attempt to take action without suitable protective equipment
Self-contained breathing apparatus
Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment
For further information refer to section 8: "Exposure controls/personal protection".

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6.2. Environmental precautions

Do not allow product to spread into the environment
Contain the spilled material by bunding (product is hazardous for the environment).

6.3. Methods and material for containment and cleaning up

For containment : Absorb spillage with:
inert absorbent material
Sand/earth
Neutralize non-recoverable product with :
a solution of caustic or soda ash, and an appropriate alcohol (methanol, ethanol or isopropanol).

Methods for cleaning up : Wash with plenty of water and detergent
Dispose of contaminated material at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes.

Hygiene measures : Always wash hands after handling the product
Always take a shower after work
Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, cool, well-ventilated area
Keep away from ignition sources
Keep out of the reach of children
Keep away from food, drink and animal feeding stuffs.

Incompatible materials : Strong oxidizing agents.

Packaging materials : Original packaging.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Nitrile-rubber protective gloves
Neoprene protective gloves.

Eye protection : Safety glasses with side shields.

Skin and body protection : Handling product in large quantities:
Impermeable suit (Hypalon, Tyvek, Saranex, PVC...).

Respiratory protection : In the event of insufficient ventilation:
Filtering respiratory protective device with a pesticide canister.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : yellow orange
Translucent.

Odour : Paste.

Odour threshold : Not applicable

pH : 4,86

pH solution : 1 %

Relative evaporation rate (butyl acetate=1) : Not applicable

Melting point : Not applicable

Boiling point : Not applicable

Flash point : 111 °C

Auto-ignition temperature : 356 °C

Decomposition temperature : Not applicable

Flammability (solid, gas) : Not applicable

Vapour pressure : Not applicable

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| | |
|----------------------------------|-----------------------------------|
| Relative vapour density at 20 °C | : Not applicable |
| Relative density | : 0,9308 (20°C) |
| Solubility | : Water: Dispersion |
| Log Pow | : Not applicable |
| Viscosity, kinematic | : 20,42 mm ² /s (40°C) |
| Viscosity, dynamic | : No data available |
| Explosive properties | : Not explosive. |
| Oxidising properties | : Non oxidizing material. |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

None to our knowledge.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

On combustion or on thermal decomposition (pyrolysis) releases :

Carbon oxydes (CO, CO₂)

Hydrogen fluoride

Ketones

Aldehyde

Hydrochloric acid

Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

| SHARK | |
|---------------------|----------------|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LC50 inhalation rat | > 5,11 mg/l/4h |

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity (single exposure) : Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity (repeated exposure) : Not classified (Based on available data, the classification criteria are not met)

Carfentrazone-ethyl (128639-02-1)

| | |
|------------|---------------------------------|
| NOAEL, rat | 50 ppm (3 mg/kg bw/day 2 years) |
|------------|---------------------------------|

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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| SHARK | |
|--------------------|------------|
| ErC50 (algae) | 0,537 mg/l |
| NOEC chronic algae | 0,1 mg/l |

12.2. Persistence and degradability

| Carfentrazone-ethyl (128639-02-1) | |
|-----------------------------------|---|
| Persistence and degradability | Half-life (in water) : 8.3 days (pH = 5) Half-life (in soil) : < 1.5 days. |

12.3. Bioaccumulative potential

| Carfentrazone-ethyl (128639-02-1) | |
|-----------------------------------|-------------|
| BCF | 159 |
| Log Pow | 3,36 (20°C) |

12.4. Mobility in soil

| Carfentrazone-ethyl (128639-02-1) | |
|-----------------------------------|--------------|
| Ecology - soil | Very mobile. |

12.5. Results of PBT and vPvB assessment

| Component | |
|-----------------------------------|-----------------------|
| Carfentrazone-ethyl (128639-02-1) | Moderately persistent |

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-------------------------|---|
| Waste treatment methods | : Discharging into rivers and drains is forbidden Dispose of in accordance with relevant local regulations Incinerate at a licensed installation Do not re-use empty containers. |
| Additional information | : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal. |

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

| | |
|------------------|--------|
| UN-No. (ADR/RID) | : 3082 |
| UN-No.(IATA) | : 3082 |
| UN-No. (IMDG) | : 3082 |

14.2. UN proper shipping name

| | |
|--------------------------------|---|
| Proper Shipping Name | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| Transport document description | : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Carfentrazone-ethyl(128639-02-1), Polyether modified trisiloxane (134180-76-0)), 9, III, (E) |

14.3. Transport hazard class(es)

| | |
|--------------------|-----|
| Class (ADR/RID) | : 9 |
| Class (IATA) | : 9 |
| Class (IMDG) | : 9 |
| Hazard labels (UN) | : 9 |



14.4. Packing group

| | |
|-------------------------|-------|
| Packing group (ADR/RID) | : III |
| Packing group (IMDG) | : III |

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14.5. Environmental hazards

Dangerous for the environment :



Other information : Dangerous for the environment.

14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 90

Classification code (UN) : M6

Orange plates :



Special provision (ADR) : 274
335
601

Transport category (ADR) : 3

Tunnel restriction code : E

Limited quantities (ADR) : 5L

Excepted quantities (ADR) : E1

EAC code : •3Z

14.6.2. Transport by sea

MFAG-No : 171

14.6.3. Air transport

No additional information available

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment acc. to art. 14 of Regulation (EC) No 1907/2006 is not required, because art. 15 of the same regulation applies

SECTION 16: Other information

Indication of changes:

This sheet was updated (refer to the date at the top of this page)

SDS changed section(s) : 2-7-9-10-14.

Other information : Shark and FMC are registered trademarks of FMC Corporation.

Full text of R-, H- and EUH-phrases:

| | |
|---------------------------|---|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |

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| | |
|---------------|---|
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Sensitisation — Skin, category 1 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Narcosis |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation |
| H226 | Flammable liquid and vapour |
| H302 | Harmful if swallowed |
| H304 | May be fatal if swallowed and enters airways |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
| H411 | Toxic to aquatic life with long lasting effects |
| R10 | Flammable |
| R20/21 | Harmful by inhalation and in contact with skin |
| R22 | Harmful if swallowed |
| R36 | Irritating to eyes |
| R37 | Irritating to respiratory system |
| R37/38 | Irritating to respiratory system and skin |
| R38 | Irritating to skin |
| R41 | Risk of serious damage to eyes |
| R43 | May cause sensitisation by skin contact |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |
| R65 | Harmful: may cause lung damage if swallowed |
| R66 | Repeated exposure may cause skin dryness or cracking |
| R67 | Vapours may cause drowsiness and dizziness |
| N | Dangerous for the environment |
| Xi | Irritant |
| Xn | Harmful |

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product