



SAFETY DATA SHEET PERFECT 50EC

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name PERFECT 50EC

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

Identified uses Pesticide

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier PelGar International Ltd
Unit 13
Newman Lane
Alton
Hampshire
GU34 2QR
United Kingdom
Telephone : +44(0)1420 80744
E-mail: garry@pelgar.co.uk

1.4. Emergency telephone number

Emergency telephone +44(0)1420 80744

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 1B - H340 Carc. 1B - H350 STOT SE 3 - H335 Asp. Tox. 1 - H304

Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

Pictogram



Signal word

Danger

PERFECT 50EC

Hazard statements

H226 Flammable liquid and vapour.
 H302+H332 Harmful if swallowed or if inhaled.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.
 H340 May cause genetic defects.
 H350 May cause cancer.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P261 Avoid breathing vapour/spray.
 P264 Wash contaminated skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
 P391 Collect spillage.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with national regulations.

Contains

PERMETHRIN, SOLVENT NAPHTHA, LIGHT, 1,2,4-TRIMETHYLBENZENE, DODECYLBENZENE SULPHONATE CALCIUM SALT, BUTANOL-norm

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

PERFECT 50EC

PERMETHRIN	30-60%
CAS number: 52645-53-1	EC number: 258-067-9
M factor (Acute) = 1000	M factor (Chronic) = 1000
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
SOLVENT NAPHTHA, LIGHT	10-30%
CAS number: 64742-95-6	EC number: 265-199-0
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Muta. 1B - H340 Carc. 1B - H350 STOT SE 3 - H335 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	
1,2,4-TRIMETHYLBENZENE	10-30%
CAS number: 95-63-6	EC number: 202-436-9
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	
DODECYLBENZENE SULPHONATE CALCIUM SALT	1-5%
CAS number: 90194-26-6	EC number: 290-635-1
Classification Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Dam. 1 - H318	

PERFECT 50EC

BUTANOL-norm	1-5%
CAS number: 71-36-3	EC number: 200-751-6
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Acute Tox. 4 - H302 STOT SE 3 - H335, H336 STOT SE 3 - H335, H336 STOT SE 3 - H335, H336	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air at once. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Rinse mouth thoroughly with water. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

PERFECT 50EC

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Keep away from heat, sparks and open flame. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Use explosion proof electric equipment. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from oxidising materials, heat and flames. Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

BUTANOL-norm

Long-term exposure limit (8-hour TWA): WEL

Short-term exposure limit (15-minute): WEL 50 ppm(Sk) 154 mg/m3(Sk)

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

Use protective gloves.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. Do not eat, drink or smoke when using this product.

Respiratory protection

Wear a respirator fitted with the following cartridge: Organic vapour filter.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

PERFECT 50EC

Colour	Brown.
Odour	Not known.
Odour threshold	No information available.
pH	pH (concentrated solution): 6.5
Melting point	No information available.
Initial boiling point and range	171°C @ 760 mm Hg
Flash point	46°C TCC (Tag closed cup).
Evaporation rate	100 (diethyl ether = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 7.5 Lower flammable/explosive limit: 0.8
Vapour pressure	2.2 mmHg @ °C
Vapour density	No information available.
Relative density	1.03 @ @ 20°C
Bulk density	No information available.
Solubility(ies)	Forms an emulsion with water. Soluble in the following materials: Aromatic solvents.
Partition coefficient	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Oxidising properties	Not oxidising.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Keep away from heat, sparks and open flame. Avoid contact with the following materials: Oxidising agents. Reducing agents.

10.5. Incompatible materials

Materials to avoid Oxidising agents. Reducing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Combustion or thermal decomposition will produce toxic and irritant fumes.

PERFECT 50EC

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 908.47

Acute toxicity - inhalation

ATE inhalation (gases ppm) 39,390.76

ATE inhalation (vapours mg/l) 96.29

ATE inhalation (dusts/mists mg/l) 4.75

Skin corrosion/irritation

Skin corrosion/irritation Very irritating to Skin.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Skin sensitisation

Skin sensitisation A skin sensitizer.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

Aspiration hazard

Aspiration hazard Aspiration can be fatal.

Inhalation May cause respiratory system irritation. Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion Harmful if swallowed. Aspiration hazard if swallowed. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

Skin contact May cause sensitisation by skin contact.

Eye contact Causes serious eye damage.

SECTION 12: Ecological Information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Toxic to fish.

12.2. Persistence and degradability

12.3. Bioaccumulative potential

Partition coefficient No information available.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of waste in compliance with all local and national regulations.

PERFECT 50EC

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993
UN No. (ADN)	1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	FLAMMABLE LIQUID, N.O.S. (CONTAINS SOLVENT NAPHTHA, LIGHT, PERMETHRIN)
Proper shipping name (IMDG)	FLAMMABLE LIQUID, N.O.S. (CONTAINS SOLVENT NAPHTHA, LIGHT, PERMETHRIN, 1,2,4-TRIMETHYLBENZENE)
Proper shipping name (ICAO)	FLAMMABLE LIQUID, N.O.S. (CONTAINS SOLVENT NAPHTHA, LIGHT, PERMETHRIN)
Proper shipping name (ADN)	FLAMMABLE LIQUID, N.O.S. (CONTAINS SOLVENT NAPHTHA, LIGHT, PERMETHRIN)

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3Y

PERFECT 50EC

Hazard Identification Number 30
(ADR/RID)

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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

15.2. Chemical safety assessment

SECTION 16: Other information

General information	The information contained in this Safety Data Sheet is believed to be true and correct, as of the issue date. The accuracy and completeness of this information and any recommendations, or suggestions are made without warranty or guarantee. Since the conditions of use are beyond the control of our company, it is the responsibility of the user to determine the conditions of safe use for this product.
Revision comments	Revised classification.
Revision date	26/05/2016
Revision	6
Supersedes date	26/05/2016
SDS number	20672
Hazard statements in full	<p>H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. 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. H340 May cause genetic defects. H350 May cause cancer. 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.</p>

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.