

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.03.2014

Version number 8

Revision: 10.03.2014

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

1.1 Product identifier

Trade name: **Protect Air Spray**

Article number: 1 1 0 1

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

Sector of Use SU21 Consumer uses: Private households / general public / consumers
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Process category PROC1 Use in closed process, no likelihood of exposure

PROC2 Use in closed, continuous process with occasional controlled exposure

Application of the substance / the mixture Surface protection

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: BO Motor Oil
Rootven 10
NL-5531 MB Bladel
Tel.: +31 (0)497 384847

Further information obtainable from: info@bomotoroil.nl

1.4 Emergency telephone number: +31 (0)497 384847 (9 AM to 4 PM, Monday to Friday)

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

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



Xi; Irritant

R38: Irritating to skin.



F+; Extremely flammable

R12: Extremely flammable.



N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67: Vapours may cause drowsiness and dizziness.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Warning! Pressurized container.
Has a narcotizing effect.

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- **Classification system:** The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· 2.2 Label elements

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· Code letter and hazard designation of product:



Xi Irritant
F+ Extremely flammable
N Dangerous for the environment

· Risk phrases:

12 Extremely flammable.
38 Irritating to skin.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
67 Vapours may cause drowsiness and dizziness.

· Safety phrases:

2 Keep out of the reach of children.
16 Keep away from sources of ignition - No smoking.
23 Do not breathe vapour/spray.
29 Do not empty into drains.
46 If swallowed, seek medical advice immediately and show this container or label.
51 Use only in well-ventilated areas.

· Special labelling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
Buildup of explosive mixtures possible without sufficient ventilation.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

- **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· 3.2 Mixtures

- **Description:** Active substance with propellant

· Dangerous components:

CAS: 106-97-8 EINECS: 203-448-7	butane F+ R12 Flam. Gas 1, H220	25-50%
CAS: 142-82-5 EINECS: 205-563-8	heptane Xn R65; Xi R38; F R11; N R50/53 R67 Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H336	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	10-25%
CAS: 108-87-2 EINECS: 203-624-3	methylcyclohexane Xn R65; Xi R38; F R11; N R51/53 R67 Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	2.5-10%
CAS: 110-82-7 EINECS: 203-806-2	cyclohexane Xn R65; Xi R38; F R11; N R50/53 R67 Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H336	0.1-1.0%

· Regulation (EC) No 648/2004 on detergents / Labelling for contents

aliphatic hydrocarbons 30%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· 4.1 Description of first aid measures

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
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- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, dry chemical, or foam. Water can be used to cool and protect exposed material.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
Remove from the water surface (e.g. skim or suck off).
- **6.4 Reference to other sections** See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
Do not seal receptacle gas tight.
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

106-97-8 butane

WEL Short-term value: 1810 mg/m³, 750 ppm
 Long-term value: 1450 mg/m³, 600 ppm
 Carc (if more than 0.1% of buta-1.3-diene)

142-82-5 heptane

WEL Long-term value: 2085 mg/m³, 500 ppm

110-82-7 cyclohexane

WEL Short-term value: 1050 mg/m³, 300 ppm
 Long-term value: 350 mg/m³, 100 ppm

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the skin.
 Avoid contact with the eyes and skin.

· Respiratory protection:

Filter A/P2
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:



Wear gloves for the protection against chemicals according to EN 374.

Solvent resistant gloves

· Material of gloves

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognise that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time may be acceptable so long as appropriate maintenance and replacement regimes are followed.

Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles (EN 166)

· Body protection:

Protective work clothing

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Aerosol

Colour: Blue

· Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: -44 °C

· Flash point: -97 °C

· Flammability (solid, gaseous): Not applicable.

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- **Ignition temperature:** 215 °C
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
- **Explosion limits:**
 - Lower:** 1.1 Vol %
 - Upper:** 10.9 Vol %
- **Vapour pressure at 20 °C:** 8300 hPa
- **Density at 20 °C:** 0.7 g/cm³
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Solvent content:**
 - Organic solvents:** 100.0 %
- **9.2 Other information** No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidizing agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**
 - 108-87-2 methylcyclohexane**
Oral LD50 2250 mg/kg (mus)
 - 110-82-7 cyclohexane**
Oral LD50 12705 mg/kg (rat)
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

* 12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
 - 142-82-5 heptane**
EC50 (24 h) >10 mg/l (daphnia)
LC50 (48 h) 4924 mg/l (fish)
 - 108-87-2 methylcyclohexane**
LC50 (48 h) 5 mg/l (fish)
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** The product is difficultly biodegradable.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish

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- **Additional ecological information:**

- **General notes:** Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA**

UN1950

- **14.2 UN proper shipping name**

- **ADR** 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
- **IMDG** AEROSOLS, MARINE POLLUTANT
- **IATA** AEROSOLS, flammable

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class** 2 5F Gases.
- **Label** 2.1

- **IMDG**



- **Class** 2.1
- **Label** 2.1

- **IATA**



- **Class** 2.1
- **Label** 2.1

- **14.4 Packing group**

- **ADR, IMDG, IATA** Void

- **14.5 Environmental hazards:**

- **Marine pollutant:** Yes
Symbol (fish and tree)
- **Special marking (ADR):** Symbol (fish and tree)

- **14.6 Special precautions for user**

- **Danger code (Kemler):** Warning: Gases.
- **EMS Number:** -
F-D,S-U

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

Not applicable.

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· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	D
· UN "Model Regulation":	UN1950, AEROSOLS, ENVIRONMENTALLY HAZARDOUS, 2.1

15 Regulatory information

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

· National regulations:

· **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H220 Extremely flammable gas.
 H225 Highly flammable liquid and vapour.
 H280 Contains gas under pressure; may explode if heated.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin 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.

R11 Highly flammable.
 R12 Extremely flammable.
 R38 Irritating to skin.
 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.
 R67 Vapours may cause drowsiness and dizziness.

· Department issuing MSDS:

Product safety department.

· Contact:

Product safety department

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organization
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

· Sources

67/548/EEC
 99/45/EEC
 EC/453-2010