



Revision 3.0 of May, 29 2015

MATERIAL SAFETY DATA SHEET

according to the regulation 453/2010 Annex II

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 - Product details

Trade name: **DISTAIR S**

Recording Office of Health: N. 19.781

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

Insecticide aerosol for domestic and civil use.

Not applicable in other uses than the uses identified.

1.3 - Details of the supplier of the safety data sheet

Manufacturer/Supplier: ORMA S.r.l. - Via Saba, 4 - 10028 Trofarello TO

Tel. +39/011.64.99.064 Fax +39/011.68.04.102

Qualified technician on drafting the MSDS: regulatory@ormatorino.it

1.4 - Emergency telephone number:

+39/011.6499064 (ORMA, office hours)

For urgent information, call a Poison Centre opened 24 hours a day

(ex. Centro Antiveleni Ospedale Niguarda, Milano +39/02.66101029)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according the CLP Regulation N. 1272/2008 and subsequent modifications and adjustments

Flammable aerosol 2 H222 Acute Toxicity 1 H400 Aquatic Chron. Toxi. 1 H410

2.2 – Label elements

Hazard labelling of the preparation according to CLP Regulation N. 1272/2008 and subsequent modifications and adjustments

Warning: DANGER GHS02 GHS09





Hazard statements (H):

H222: Extremely flammable aerosol

H229: Pressurized container: may burst if heated.

H410: Very toxic to aquatic life with long lasting effects

Precautionary statements (P):

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

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

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

P251: Pressurized container: Do not pierce or burn, even after use.

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

P273: Avoid release to the environment.

P410+P412: Protect from sunlight. Do no expose to temperatures exceeding 50°C.

2.3 - Other hazards

Not available information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>3.1 - Substances:</u> Not pertinent information.

3.2 - Mixture: It contains

CHEMICAL NAME	CONC.	CLASSIFICATION 1272/2008 (CLP)
PYRETHRUM EXTRACT 50% EINECS 232-319-8 CAS 8003-34-7	2%	Acute Tox. 4, H302, H312; H332 Aquatic Acute 1 H400 Aquatic Chronic 1 H410
PIPERONYL BUTOXIDE EINECS 200-076-7 CAS 51-03-6	5%	Aquatic Acute 1 H400 Aquatic Chronic 1 H410
HYDROCARBON,C9-C11 Reg. n.: 01-2119463258-33 CE: 919-857-5	< 10%	Asp. Tox. 1 H304 Flamm Liq. 3 H226 Target Org. Tox. 3 H336 EUH 066 - Nota H
ETANOLO EINECS 200-661-7 CAS 67-63-0	< 20 %	Flam. Liq. 2 H225
HYDROCARBON C4* EINECS 289-339-5 CAS 87741-01-3 EC No 649-113-00-2 Reg. N. 01-2119480480-41-XXXX	< 50%	Flam. Gas 1 H220 Press. Gas H280 Nota U – Nota K
PROPANO EINECS 200-827-9 CAS 74-98-6 EC No 601-003-00-5 Reg. N. 01-2119486944-21-XXXX	< 50%	Flam. Gas 1 H220 Press. Gas H280 Nota U

*In the commercial composition may contain small amounts of other saturated hydrocarbons (ethane, isobutane and pentane) or unsaturated (butylene or propylene). It CONTAINS 1,3-BTADIENE IN QUANTITY 'MORE THAN 0,1%. Then the classification of Toxic phrases H350 and H340 can be omitted. The full text of hazard (H) phrases is given in section 16. Notes U, K (Annex 1 Directive 67/548 EEC and / or Annex VI to Regulation EC 1272/2008). See section 16.





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SECTION 4: FIRST-AID MEASURES

4.1 - Description of first-aid measures

<u>General information:</u> if symptoms persist, seek medical care, giving the information contained in the label and in this sheet. In case of accident, the first-aid measure should be performed by trained personnel, in order to avoid the injured further complication or damages.

After eye contact: Rinse opened eye with water for several minutes and get medical advice.

After skin contact: Immediately wash with plentiful running water.

After inhalation: remove the patient to fresh air; consult get medical advice if necessary.

After swallowing: get medical advice, showing the safety sheet. Do not induce vomiting.

4.2 - Main symptoms and effects, both acute and retarded

For symptoms and effects caused by the substances see section 11. Symptoms of poisoning may even occur after several hours, therefore medical observation for at least 48 hours after the accident may be necessary.

4.3 - Indications about the possible need to get medical advice and special treatments

Symptomatic treatment and control of vital functions.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 - Extinguishing agents:

Suitable extinguishing agents: CO2, dry chemical extinguisher, sand.

Unsuitable extinguishing agents: Water with full jet. Water is not effective for fire-extinguishing, however it can be used to cool down containers exposed to flames, in order to prevent bursts and explosions.

5.2 - Special hazards arising from the substance or mixture

Particular fire dangers: In case of fire, toxic gas and irritating vapours emission.

5.3 - Advice for firefighters

Protective equipment: Wear suitable rebreather (especially in indoor locals) and complete protection outfit. Special procedures: Contain the spread. Stay upwind. Avoid to breathe vapours. Cool down the containers exposed to fire with nebulized water. Avoid extinguishing water to release to the environment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 -Personal precautions, protective equipment and emergency procedures

Use suitable personal protective equipment (see section 8). Ensure adequate ventilation.

6.2 Environmental precautions

Keep the product away from sewers, fluvial and marine water to avoid environmental pollution (in that case, inform

respective authorities).

6.3 - Methods and material for containment and cleaning up

In case of spreading on the ground, stem with sand or soil and collect with absorbing material. Dispose the collected material in disposal container (see Section 13).

6.4 - Reference to other sections

Further information regarding individual protection and disposal are reported in section 8 and 13.





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SECTION 7: HANDLING AND STORAGE

7.1 - Precautions for safe handling

Ensure good ventilation. Avoid eating, drinking and smoking. Use suitable protective clothes (see Section 8). Wash with water and soap after handling: ensure good ventilation of the workplace. Do not smoke and do not use on naked flame. 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 form sunlight and do not expose to temperatures exceeding 50°C, for example incandescent lamps. Do not pierce or burn. Even after use.

7.2 - Conditions for safe storage, including any incompatibilities

Store in the original tightly sealed receptacle, away from food and beverages and away from the reach of children

and domestic animals. Store in a cool location. Protect from direct sunlight. Where applicable, observe official

regulations on storing packaging with pressurized containers.

7.3 - Specific end use(s)

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 - Control parameters

Pyrethrum: 5 mg/m3 (TLV-TWA). Ref. ACGIH (Sehen Sie Abschnitt 16). C1-C4 alkanes (propane and butane): 1000 ppm. Ref. ACGIH (see section 16).

Hydrocarbons C9-C11: DNEL 208 mg/kg, parameter: systemic effects/long term/dermal/workers; Hydrocarbons C9-C11: DNEL 871 mg/m3, parameter: systemic effects / long term/inhalation/workers; Hydrocarbons C9-C11: DNEL 125 mg/kg, parameter: systemic effects/long term/dermal/population; Hydrocarbons C9-C11: DNEL 185 mg/m3, parameter: systemic effects/long term/inhalation/population;

Hydrocarbons C9-C11: DNEL 125 mg/kg, parameter: systemic effects/long term/oral/population. C4 hydrocarbons: DNEL 2.21 mg/m3 long-term exposure/systemic effects/inhalation/workers; C4 hydrocarbons: DNEL 23.4 mg/kg, exposure to long-term/systemic effects/dermal workers;

C4 hydrocarbons: DNEL 0,0064mg/m3 long-term exposure/systemic effects/inhalation/consumer.

8.2 - Exposure controls

General protective measures: Use the preparation according the indication contained in this safety sheet. Use individual protective devices recommended in this section.

Respiratory protection: In not so ventilated environments, where high percentage of product could be present, protect adequately the respiratory tract (mask with suitable filter against gas and solvents).

Protection of hands: Use impermeable and chemical substances resistant gloves (EN 374).

Eye protection: Use safety glasses with side protection, in case of possible contact to eyes.

Body protection: If need use protective coats.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

Form: aerosol Color: pale vellow Odor: characteristic -41°C

Boiling Temperature

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Ignition point14°CIgnition temperature425°C

Explosion hazard Non-explosive product

Flammability limits

 - lower
 1.8 vol%

 - upper
 12.0 vol%

 Vapour pressure 20 °C
 43.0 hPa

 Density
 N.A.

Solubility in water Slight soluble

SECTION 10: STABILITY AND REACTIVITY

10.1 - Reactivity

Not particular reactivity danger with other substances under normal operating conditions.

10.2 - Chemical Stability

Stable under normal operating and storage conditions.

10.3 - Possibility of hazardous reactions

No dangerous reactions known.

10.4 - Conditions to avoid

Avoid overheating, electrostatic charge, direct exposition to sun and any lighting source.

10.5 - Incompatible materials

No further relevant information available.

10.6 - Hazardous decomposition products

The thermal decomposition causes the formation of hazardous compounds.

SECTION 11: TOXICAL INFORMATION

11.1 - Information on toxicological effects

Mechanism of action: Permethrin acts by keeping the sodium channels open in the neuronal membranes, causing an increased flow of sodium in the cell, maintaining it in a hyper excitability state.

Inhalation Possible irritations of respiratory tract (in case of continuous inhalation narcotic

effects caused by propellants may occur).

Swallowing Possible irritations, nausea, vomit, abdominal diseases.

Skin contact Possible irritations. Eyes contact Possible irritations.

Toxicological data:

Pyrethrum:

LD50 Acute Rat >2000 mg/kg (oral); LD50 Rabbit >2000 mg/kg (dermal acute);

LC50 Rat (4h) 6,8 mg/1

Piperonyl butoxide: LD50 Rat: 4570 mg / kg (oral); LD50 rabbit> 2000 mg / kg (dermal); Rat LC50 (4h)

 $5.9\ mg$ / l inhalation. Not irritating to skin and eyes. Not sensitizing to skin.

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C9-C11 hydrocarbons: LD50 rat> 4951 mg / m3 inhalation; LD50 rat> 15000 mg / kg oral; LD50 rabbit> 3160mg / kg dermal.

Inhalation: negative symptoms may include the following: nausea or vomiting,

Head, drowsiness / dizziness / unconsciousness. Skin contact: irritation, dryness, cracking.

Ingestion: nausea or vomiting.

C4 hydrocarbons: LC50 rat: 5,3 mg / 1 (4h) inhalation. Irritant effect heat to the skin and eyes due to cold temperature. No sensitizing effect found.

Propane: LC50 rat: 658 mg / 1 (4h) inhalation. Irritant and corrosive to mucous membranes. It can cause burns from cold. Respiratory sensitization: causes headache and drowsiness.

SECTION 12: ECOLOGICAL INFORMATION

The mixture is very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.1 - Toxicity

Pyrethrum: LC50 Fish 0,01 mg/ (96h); EC50 Daphnia magna > 0,012 mg/l (48h).

Piperonyl butoxide: fish LC50 3.94 mg / 1 (96h); EC50 Daphnia magna: 0.51 mg / 1 (48h); Crustaceans EC50: 3.89 mg / 1 (72h).

C9-C11 hydrocarbons: EL50 daphnia magna> 1000 mg / 1 (24h); EL50 Alga> 1000 mg / 1 (72h); Fish LL50> 1000 mg / 1 (24h).

Petroleum distillates: Floats on water. It should not be toxic limit of solubility in water

C4 hydrocarbons: fish LC50: 19 mg / l acute toxicity (96h); Dapnhia magna LC50: 14.2 mg / l acute toxicity

(48h); Algae EC50: 7.7 mg / l acute toxicity (96h).

12.2 - Persistence and degradability

Hydrocarbons C9-C11: Biodegradable OECD Test Guideline 301 F = 80%

Piperonylbutoxide: not readily biodegradable.

Petroleum distillates: slightly biodegradable due to insolubility in water.

12.3 - Bioaccumulative potential

Pyperonylbutoxide: BCF 91-260-380

12.4 - Mobility in soil

Hydrocarbons C9-C11: low mobility of the soil **Piperonylbutoxide:** low mobility of the soil **Petroleum distillates:** Low mobility

12.5 - Results of PBT and vPvB assessment

No further information available.

12.6 - Other adverse effects

Pyrethrum: very toxic to aquatic organisms

C4 hydrocarbons: due to the evaporation of liquid gas spilled, it may emerge in the ecosystem, freeze damage (dangerous substance on the water).

SECTION 13: DISPOSAL CONSIDERATION

13.1 - Waste treatment methods

General recommendation: Recover if possible. Operate according to local and national dispositions in force.



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Containers, even if completely emptied, must not be released to the environment. If they contain residues, they must be classified, stored and sent to an appropriate waste management plant. For a non-professional use the completely empty container can be disposed with household garbage, according to the local dispositions for waste separation.

Classification: The classification of waste is an obligation of the producer. Possible EWC codes: 16 05 04 (gas in pressurized container containing dangerous substances) if the container is not completely emptied of contents, or 15 01 04 (containers in metal) if the containers are completely emptied of contents).

SECTION 14: TRANSPORT INFORMATION

14.1 - UN number

1950

14.2 - UN proper shipping name

AEROSOL Flammable

14.3 - Transport hazard class(es)

Class:2

5F label 2.1

14.4 - Packing group

III Limitated quantity in packaging: 1 liter (external packanging).

14.5 - Environmental hazards

Marine pollutant

14.6 - Special precautions for user

Special dispositions 190, 327, 344, 625

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

N.A.

SECTION 15: REGULATORY INFORMATION

15.1 - Specific standards and legislation on health, safety and environment for the preparation/substance

Substances in Candidate List (Art. 59 REACH): None

Restrictions on the product or the substances contained according to EC-Regulation 1907/2006 Enclose XVII:None

Substances subject to authorization (REACH Enclose XIV):None.

Sanitary controls: Workers exposed to this health hazardous chemical agent should undergo to health surveillance performed according to the dispositions of Art. 41 of the proposed Law 81, April 2008, unless risks for safety and health of the workers has been assessed irrelevant, as provided for Art. 224, paragraph 2. Seveso Category: 7b, 9i.

Regulations:

- Regulation 99/45/CE (classification and labeling of dangerous substances), D.Lgs n° 65/2003;
- Regulation 67/548/CE (classification and labeling of dangerous substances);
- Regulation (CE) 1272/2008 (CLP);
- Regulation 98/24/CE D.Lgs 81/2008;
- Regulation (CE) 1907/2006 (REACH);

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- Regulation (CE) 790/2009 (I Atp. CLP);
- Regulation (CE) 453/2010;

15.2 - Chemical safety assessment

A chemical safety assessment for the product has been not elaborated.

SECTION 16: OTHER INFORMATION

This safety data sheet cancels and replaces the previous version 1 dated 05/06/2014. All the sheet sections has been subjected to modifications.

Notes (section 8): TLV-TWA (Threshold Limit Value –Time Weighted Average): limit values weighted

in 8 hours. **TLV-STEL** (Threshold Limit Value - Short Time Exposure Limit). **ACGIH** (American Conference of Governmental Industries Hygienists).

Notes (section 3.2): Note U: When put on the market gases have to be classified as "Gases under

pressure" in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. **Note K:** The classification as a carcinogen need not apply if it can be shown that MIXTURE CONTAINS 1,3-BUTADIENE PERCENT LOWER THAN 0.1% OF WEIGHT / WEIGHT (EINECS no. 203450-8). If the substance is not classified as a carcinogen at least should include precautionary statements

(P102-) P210-403.

Hazard indication text (H) mentioned on sheet section 2-3

Flam. Gas 1 - Flammable Gas, Category 1

Flam. Liq. 2 - Flammable Liquid, Category 2

STOT SE 3 - Specific target organ toxicity - single exposure, Category 3

Asp. Tox. 1 - Aspiration hazard, Category 1

Aquatic Acute 1 – Hazardous to the aquatic environment, acute toxicity Category 1 Aquatic Chronic 1 – Hazardous to the aquatic environment, chronic toxicity Category 1

Acute Tox. 4 - Acute toxicity, Category 4

Flamm. Liq. 3 – Flammable liquids, Category 3

Gas under pressure - compressed gas

Acute Tox. Dermal 4 - harmful in contact with skin, Category 4

H220 - Highly flammable gas

H225 - Highly flammable liquid and vapour

H226 - Flammable liquid and vapour.

H280 - Contains gas under pressure; may explode if heated.

H302 - Harmful if swallowed

H312 - Harmful in contact with skin.

H332 - Harmful if inhaled

H304 - May be fatal if swallowed and enters airways

H336 - May cause drowsiness or dizziness

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Modify sections: 2, 3, 11, 12, 16.

This sheet cancels and replaces all previous versions.

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