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1. Identification

Product identifier used on the label

HYDROPY-300 FORMULA 2

Recommended use of the chemical and restriction on use

Recommended use*: insecticide

Details of the supplier of the safety data sheet

Company:

BASF Canada Inc. 100 Milverton Drive Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666 BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

PCP # 29762

Synonyms: Pyrethrins + piperonyl butoxide

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Classification of the product

Flam. Liq. 4 Flammable liquids
Acute Tox. 4 (Inhalation - vapour) Acute toxicity
Acute Tox. 4 (oral) Acute toxicity

Eye Dam./Irrit. 2B Serious eye damage/eye irritation

Skin Sens. 1B Skin sensitization

Aquatic Acute 1 Hazardous to the aquatic environment - acute Aquatic Chronic 1 Hazardous to the aquatic environment - chronic

^{*} The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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Label elements

Pictogram:



Signal Word: Warning

Hazard Statement:

H227 Combustible liquid.
H320 Causes eye irritation.
H332 Harmful if inhaled.
H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves and eye/face protection.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.
P260 Do not breathe mist or vapour.

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P272 Contaminated work clothing should not be allowed out of the workplace.

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

P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or

doctor/physician.

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

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

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.

P301 + P330 IF SWALLOWED: rinse mouth.

P391 Collect spillage.

P362 + P364 Take off contaminated clothing and wash before reuse.

P337 + P311 If eye irritation persists: Call a POISON CENTER or doctor/physician.
P370 + P378 In case of fire: Use water spray, dry powder, foam or carbon dioxide for

extinction.

Precautionary Statements (Storage):

P403 + P235 Store in a well-ventilated place. Keep cool.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

Hazards not otherwise classified

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 9 % Inhalation - vapour

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The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 9 % Inhalation - mist

According to Controlled Products Regulations (CPR) (SOR/88-66)

Emergency overview

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

Harmful if swallowed.

Moderately irritating to the eyes.

Repeated or prolonged skin contact may cause allergic skin reactions in sensitive individuals.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

| CAS Number | Content (W/W) | Chemical name |
|-------------------|---------------|--|
| 8003-34-7 | 3.0 % | Pyrethrins |
| 51-03-6 | 15.0 % | Piperonylbutoxide |
| 71-36-3 | 1.0 - 3.0 % | n-butanol |
| 128-37-0 | 0.1 - 1.0 % | BHT |
| 64742-47-8 | 1.0 - 3.0 % | Distillates (petroleum), hydrotreated light |
| 68953-96-8 | 3.0 - 5.0 % | Benzenesulfonic acid, mono-C11-13-branched alkyl |
| | | derivs., calcium salts |

4. First-Aid Measures

Description of first aid measures

General advice:

First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If inhaled:

Remove the affected individual into fresh air and keep the person calm.

If on skin:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

Most important symptoms and effects, both acute and delayed

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Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: foam, dry powder, carbon dioxide, water spray

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide, If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Methods and material for containment and cleaning up

Dike spillage. Pick up with suitable absorbent material. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for safe handling

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Keep container tightly sealed. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Provide means for controlling leaks and spills. Follow label warnings even after container is emptied. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

Protection against fire and explosion:

The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Conditions for safe storage, including any incompatibilities

Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed. Keep away from heat. Protect from direct sunlight.

Storage stability:

May be kept indefinitely if stored properly.

If an expiry date is mentioned on the packaging/label this takes priority over the statements on storage duration in this safety data sheet.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

n-butanol OSHA PEL PEL 100 ppm 300 mg/m3; CLV 50 ppm 150

mg/m3; SKIN_FINAL;

The substance can be absorbed through the skin.

ACGIH TLV TWA value 20 ppm;

Advice on system design:

Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

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Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form: liauid Odour. solvent-like

Odour threshold: Not determined due to potential health

hazard by inhalation.

light yellow Colour:

approx. 4 - 6 pH value: (1 %(m), 25 °C)

Information applies to the solvent. Freezing point: approx. 0 °C Boiling point: approx. 100 °C Information applies to the solvent. Flash point: approx. > 85 °C

Lower explosion limit: As a result of our experience with this

product and our knowledge of its

composition we do not expect any hazard

as long as the product is used

appropriately and in accordance with the

intended use.

As a result of our experience with this Upper explosion limit:

product and our knowledge of its

composition we do not expect any hazard

as long as the product is used

appropriately and in accordance with the

intended use.

Autoignition: not determined Vapour pressure:

(20°C) Information applies to the approx. 23 hPa

solvent.

(20 °C) Density: approx. 1.0157

g/cm3

Vapour density: not applicable

Thermal decomposition: carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To

avoid thermal decomposition, do not overheat.

82 mPa.s (22 °C) Viscosity, dynamic: Solubility in water: miscible

Evaporation rate: not applicable

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

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10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.

Incompatible materials

inorganic acids, bases, oxidizing agents

Hazardous decomposition products

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

Thermal decomposition:

Possible thermal decomposition products:

carbon monoxide, carbon dioxide, nitrogen dioxide, nitrogen oxide

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Slightly toxic after single ingestion. Relatively nontoxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

<u>Oral</u>

Type of value: LD50

Species: rat

Value: approx. 1,750 mg/kg

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Inhalation

Type of value: LC50 Species: rat Value: > 2.7 mg/l Exposure time: 4 h No mortality was observed.

Dermal

Type of value: LD50 Species: rat

Value: > 5,000 mg/kg

Irritation / corrosion

Assessment of irritating effects: May cause slight but temporary irritation to the eyes. May cause slight irritation to the skin.

<u>Skin</u>

Species: rabbit

Result: moderately irritating

Eye

Species: rabbit Result: Irritant.

Sensitization

Assessment of sensitization: Caused skin sensitization in animal studies.

modified Buehler test Species: guinea pig

Result: Caused skin sensitization in animal studies.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organization was observed after repeated administration to animals.

Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

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Other Information

Misuse can be harmful to health.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Toxicity to fish

Information on: pyrethrum LC50 (96 h) 0.0052 mg/l, Oncorhynchus mykiss (static) No observed effect concentration 0.0019 mg/l, Pimephales promelas LC50 (96 h) 0.01 mg/l, Lepomis macrochirus

Information on: Piperonyl butoxide LC50 (96 h) 6.12 mg/l, Oncorhynchus mykiss (other)

Aquatic invertebrates

Information on: pyrethrum EC50 (48 h) 0.012 mg/l, Daphnia magna No observed effect concentration (28 d) 0.00086 mg/l, Daphnia magna EC50 (48 h) 0.0014 mg/l, Mysidopsis bahia

Information on: Piperonyl butoxide EC50 (48 h) 0.51 mg/l, Daphnia magna (other)

Aquatic plants

Information on: pyrethrum

No toxic effects occur within the range of solubility.

Information on: piperonyl butoxide EC50 14.9 mg/l, Chlorella fusca

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Poorly biodegradable.

The product has not been tested. The statement has been derived from the properties of the individual components.

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Assessment biodegradation and elimination (H2O)

Information on: pyrethrum

Not readily biodegradable (by OECD criteria).

Information on: Piperonyl butoxide

Biodegradable.

Information on: Distillates (petroleum), hydrotreated light

Not readily biodegradable (by OECD criteria). Inherently biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment bioaccumulation potential

Information on: pyrethrum

Information on: Distillates (petroleum), hydrotreated light;

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

Accumulation in organisms is expected.

Bioaccumulation potential

Information on: Piperonyl butoxide

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

Mobility in soil

Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: pyrethrum

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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13. Disposal considerations

Waste disposal of substance:

See product label for disposal and recycling instructions.

Container disposal:

Rinse the container or liner as needed for disposal. Add rinsate to spray tank. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHSM
Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains PYRETHRIN 1)

Air transport

IATA/ICAO

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains PYRETHRIN 1)

15. Regulatory Information

Federal Regulations

Registration status:

Chemical DSL, CA released; restriction on quantity / not listed

Crop Protection DSL, CA released / exempt

WHMIS does not apply to this product.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

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16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2015/03/09

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

END OF DATA SHEET