## SECTION 1. IDENTIFICATION

| | | |
|---|---|---|
| Product name | : | PREVENTOL AM 63-D |
| Product code | : | 000000000062239670 |
| EPA registration number | : | 39967-160 |

**Manufacturer or supplier's details**

| | | |
|---|---|---|
| Company | : | LANXESS Corporation<br>Product Safety & Regulatory Affairs<br>111 RIDC Park West Drive<br>Pittsburgh, Pennsylvania 15275-1112 |
| Responsible Department | : | (800) LANXESS<br>(412) 809-1000 |
| Emergency telephone | : | CHEMTREC (800) 424-9300 or<br>(703) 527-3887 (Outside U.S.A) and mention CCN12916.<br>Lanxess Emergency Phone (800) 410-3063. |

**Recommended use of the chemical and restrictions on use**

| | | |
|---|---|---|
| Recommended use | : | Biocide for industrial application |

## SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200).**

| | | |
|---|---|---|
| Eye irritation | : | Category 2A |
| Skin sensitization | : | Category 1 |
| Germ cell mutagenicity | : | Category 1B |
| Carcinogenicity | : | Category 2 |
| Reproductive toxicity | : | Category 1B |
| Specific target organ toxicity - single exposure | : | Category 2 (Blood) |
| Specific target organ toxicity - repeated exposure | : | Category 1 (larynx) |

**GHS label elements**

Hazard pictograms :

Signal Word : Danger

Hazard Statements : May cause an allergic skin reaction.
Causes serious eye irritation.
May cause genetic defects.
Suspected of causing cancer.
May damage fertility or the unborn child.
May cause damage to organs (Blood).
Causes damage to organs (larynx) through prolonged or repeated exposure.

Precautionary Statements :

**Prevention:**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Call a POISON CENTER/ doctor.
IF exposed or concerned: Get medical advice/ attention.
If skin irritation or rash occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Wash contaminated clothing before reuse.

**Storage:**

Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Components**

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|---|---|
| 3-(3,4)-Dichlorophenyl)-1,1-dimethylurea | 330-54-1 | >= 10 - < 20 |
| carbendazim | 10605-21-7 | >= 5 - < 10 |
| 3-iodo-2-propynyl butylcarbamate | 55406-53-6 | >= 1 - < 5 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

## SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Remove to fresh air immediately. Get medical attention immediately.
If unconscious, place in recovery position and get medical attention immediately.
Maintain open airway.
Loosen tight clothing such as a collar, tie, belt or waistband.
The exposed person may need to be kept under medical surveillance for 48 hours.
If not breathing, if breathing is irregulor or respiratory arrest occurs, provide artifical respiration, or oxygen by a trained professional, using a pocket type respirator.

In case of skin contact : Get medical attention immediately.
Wash skin immediately with plenty of water and soap. Subsequent cleansing with polyethyleneglycol 400, then again with water and soap.
Remove contaminated clothing and shoes.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Continue to rinse for at least 20 minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical attention if symptoms appear.

If swallowed : Rinse mouth with water.
Do not induce vomiting unless directed to do by medical personnel.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
If unconscious, place in recovery position and get medical attention immediately.
Never give anything by mouth to an unconscious person.

Maintain open airway.

**Most important symptoms and effects, both acute and delayed**

| | | |
|---|---|---|
| Symptoms | : | Skin: Causes irritation with symptoms of reddening, itching, and swelling.<br>Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.<br>Eye: Causes irritation with symptoms of reddening, tearing, stinging, and swelling.<br>Skin, Ingestion, Inhalation: May cause methemoglobin formation resulting in a reduced ability of the blood to carry oxygen.<br>Adverse symptoms sometimes include the following:<br>Effects on fetal development.<br>carcinogenic effects<br>mutagenic effects |
| Effects | : | May cause an allergic skin reaction.<br>Causes serious eye irritation.<br>May cause genetic defects.<br>Suspected of causing cancer.<br>May damage fertility or the unborn child.<br>May cause damage to organs.<br>Causes damage to organs through prolonged or repeated exposure. |
| Protection of first-aiders | : | No action shall be taken involving any personal risk or without suitable training. |
| Notes to physician | : | Treat symptomatically.<br><br>Immediately give oxygen if signs of cyanosis (lips, ears, fingernails). Spontaneous reversal of methemoglobin can occur after termination of exposure. Cyanosis alone does not require treatment. Provide supportive measures only unless there are clinical signs/symptoms of hypoxia other than cyanosis, or if methemoglobin levels are >30%. Methylene blue may be used if clinically indicated. Hyperbaric oxygen therapy should be considered if methylene blue therapy is not effective or contraindicated (G6PD deficiency). Consider exchange transfusions for severe cases that are refractory to other treatment. Methemoglobin development may be delayed and victim should be observed for at least 6 hours. Hemolysis may appear 24 hours or more after exposure and may cause acute renal failure and arrhythmias. Patients with significant exposures should be monitored for hypoxia and hemolysis for up to 7 days after exposure.<br>In case of inhalation of decomposition products in a fire, symptoms may be delayed.<br>The exposed person may need to be kept under medical surveillance for 48 hours. |

## SECTION 5. FIRE-FIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable extinguishing media | : | None known. |
| Specific hazards during fire fighting | : | Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion products | : | Carbon dioxide (CO2)<br>Carbon monoxide<br>Nitrogen oxides (NOx)<br>Halogenated compounds |
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for fire-fighters | : | Wear self-contained breathing apparatus for firefighting if necessary. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | No action shall be taken involving any personal risk or without suitable training.<br>Evacuate personnel to safe areas.<br>Keep unnecessary and unprotected personnel from entering.<br>Do not touch or walk through spilled material.<br>Do not breathe vapors or spray mist.<br>Put on appropriate personal protection equipment. |
| Environmental precautions | : | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : | Dispose of wastes in an approved waste disposal facility.<br>Stop leak if safe to do so.<br>Move containers from spill area.<br>Wash spillages into an effluent treatment plant or proceed as follows.<br>Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).<br>Contaminated absorbent material may pose the same hazard as the spilled product. |

## SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Remove contaminated clothing and protective equipment before entering eating areas.
Workers should wash hands and face before eating, drinking and smoking.
Put on appropriate personal protection equipment.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
Persons with a history of skin sensitization to this product should not be employed in any process in which this product is used.
Avoid exposure during pregnancy.

Conditions for safe storage : Store in accordance with local regulations.
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.
Keep container closed when not in use.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Do not store in unlabeled containers.
Use appropriate container to avoid environmental contamination.
Empty containers retain residue and can be dangerous.
Do not reuse container.

Recommended storage temperature : 32 - 104 °F / 0 - 40 °C

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ingredients with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| 3-(3,4)-Dichlorophenyl)-1,1-dimethylurea | 330-54-1 | TWA | 10 mg/m3 | ACGIH |
| kaolin | 1332-58-7 | TWA (Respirable particulate matter) | 2 mg/m3 | ACGIH |
| | | TWA (total dust) | 15 mg/m3 | OSHA Z-1 |
| | | TWA (respirable fraction) | 5 mg/m3 | OSHA Z-1 |

**Engineering measures** : This information is not available.

**Personal protective equipment**

| | | |
|---|---|---|
| Respiratory protection | : | Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.<br>The following respirator is recommended if airborne concentrations exceed the appropriate standard/guideline.<br>NIOSH approved, air-purifying particulate respirator with N-95 filters. |
| Hand protection | | |
| Material | : | Nitrile rubber - NBR |
| Wearing time | : | < 60 min |
| Remarks | : | After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations |
| Eye protection | : | Tightly fitting safety goggles |
| Skin and body protection | : | Protective suit<br>Impervious clothing |
| Hygiene measures | : | Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Wash contaminated clothing before reusing.<br>Ensure that eyewash stations and safety showers are close to the workstation location. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | aqueous suspension |
| Physical state | : | liquid |
| Color | : | white, to, beige |
| Odor | : | No data available |
| Odor Threshold | : | No data available |

| | | |
|---|---|---|
| pH | : | 7.4<br>Concentration: 10 %<br>Method: DIN 51369 |
| Melting point/freezing point | : | 23 °F / -5 °C |
| Boiling point/boiling range | : | 212 °F / 100 °C |
| Flash point | : | > 212 °F / > 100 °C |
| Evaporation rate | : | No data available |
| Self-ignition | : | No data available |
| Burning number | : | No data available |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative density | : | No data available |
| Density | : | 1.14 g/cm3 (68 °F / 20 °C) |
| Solubility(ies) | | |
| Water solubility | : | miscible |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | 605 mPa.s |
| Viscosity, kinematic | : | No data available |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No specific test data related to reactivity available for this |

product or its ingredients.

| | | |
|---|---|---|
| Chemical stability | : | Stable under normal conditions. |
| Conditions to avoid | : | No data available |
| Incompatible materials | : | No specific data. |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

## SECTION 11. TOXICOLOGICAL INFORMATION

The most important known symptoms and effects are described in Section 2 and/or Section 4.

**Acute toxicity**

Not classified based on available information.

**Product:**

| | | |
|---|---|---|
| Acute oral toxicity | : | Acute toxicity estimate: 2,772 mg/kg<br>Method: Calculation method |
| Acute inhalation toxicity | : | Acute toxicity estimate: 22.79 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Method: Calculation method |
| Acute dermal toxicity | : | Acute toxicity estimate: > 5,000 mg/kg<br>Method: Calculation method |

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

| | | |
|---|---|---|
| Acute inhalation toxicity | : | LC50 (Rat, male and female): > 5.05 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Method: OECD Test Guideline 403<br>Assessment: The substance or mixture has no acute inhalation toxicity<br>Remarks: Highest producible concentration. |
| Acute dermal toxicity | : | LD50 (Rat, male and female): > 5,000 mg/kg<br>Method: OECD Test Guideline 402 |

**carbendazim:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 6,400 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): > 5.4 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist |

Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

**3-iodo-2-propynyl butylcarbamate:**

Acute oral toxicity : LD50 (Rat): > 300 - 500 mg/kg
Method: OECD Test Guideline 423

Acute inhalation toxicity : LC50 (Rat, male and female): 0.67 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Remarks: Extrapolation according to Regulation (EC) No. 440/2008

**Skin corrosion/irritation**

Not classified based on available information.

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

**carbendazim:**

Assessment : No skin irritation

**3-iodo-2-propynyl butylcarbamate:**

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

Species : Rabbit
Result : No eye irritation
Method : OECD Test Guideline 405

**carbendazim:**

Assessment : No eye irritation

**3-iodo-2-propynyl butylcarbamate:**

Species : Rabbit
Result : Risk of serious damage to eyes.
Method : OECD Test Guideline 405

**Respiratory or skin sensitization**

**Skin sensitization**

May cause an allergic skin reaction.

**Respiratory sensitization**

Not classified based on available information.

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

Routes of exposure : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitization.
GLP : yes

**carbendazim:**

Routes of exposure : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Not a skin sensitizer.

**3-iodo-2-propynyl butylcarbamate:**

Routes of exposure : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : May cause sensitization by skin contact.

**Germ cell mutagenicity**

May cause genetic defects.

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

Genotoxicity in vitro : Test system: Bacteria
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

**carbendazim:**

Germ cell mutagenicity - Assessment : Positive result(s) from in vivo mammalian somatic cell mutagenicity tests.

Presumed to induce heritable mutations in the germ cells of humans.

**3-iodo-2-propynyl butylcarbamate:**

Genotoxicity in vitro : Test system: Bacteria
Method: OECD Test Guideline 471
Result: negative

Test system: Mammalian-Animal
Method: OECD Test Guideline 476
Result: negative

Test system: Mammalian-Animal
Method: OECD Test Guideline 473
Result: negative

**Carcinogenicity**

Suspected of causing cancer.

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

| | | |
|---|---|---|
| Species | : | Rat, male |
| Application Route | : | Oral |
| NOAEL | : | 1 - 10 mg/kg body weight |
| Method | : | OECD Test Guideline 453 |
| Result | : | equivocal |

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Reproductive toxicity**

May damage fertility or the unborn child.

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

| | | |
|---|---|---|
| Effects on fertility | : | Species: Rat, male and female<br>Application Route: Oral<br>Dose: 14,8 milligram per kilogram<br>Method: OECD Test Guideline 416<br>Result: No effects on fertility and early embryonic development were detected. |
| Effects on fetal development | : | Species: Rat, female<br>Application Route: Oral<br>Dose: 10 milligram per kilogram<br>Method: OECD Test Guideline 414<br>Result: No teratogenic potential. |

**carbendazim:**

| | | |
|---|---|---|
| Reproductive toxicity - Assessment | : | Clear evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments<br><br>Clear evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments |

**STOT-single exposure**

May cause damage to organs (Blood).

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

| | | |
|---|---|---|
| Assessment | : | May cause respiratory irritation. |
| Target Organs | : | Blood |
| Assessment | : | May cause damage to organs. |

**STOT-repeated exposure**

Causes damage to organs (larynx) through prolonged or repeated exposure.

**Components:**

**3-iodo-2-propynyl butylcarbamate:**

| | | |
|---|---|---|
| Target Organs | : | larynx |
| Assessment | : | Causes damage to organs through prolonged or repeated exposure. |

**Repeated dose toxicity**

**Components:**

**3-iodo-2-propynyl butylcarbamate:**

| | | |
|---|---|---|
| Species | : | Rat |
| NOAEL | : | 1,16 mg/m³ |
| Application Route | : | Inhalation |
| Test atmosphere | : | dust/mist |
| Exposure time | : | 91 d |
| Number of exposures | : | 7 days/week |
| Method | : | OECD Test Guideline 413 |
| GLP | : | yes |
| Remarks | : | Subchronic toxicity |

| | | |
|---|---|---|
| Species | : | Rat |
| NOAEL | : | 20 mg/kg |
| Application Route | : | Oral |
| Exposure time | : | 2 yr |
| Number of exposures | : | 7 days/week |
| Remarks | : | Chronic toxicity |

**Aspiration toxicity**

Not classified based on available information.

**Further information**

**Product:**

| | | |
|---|---|---|
| Remarks | : | No data available |

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 14.7 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203<br>Remarks: Fresh water |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 1.4 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202<br>Remarks: Fresh water |
| Toxicity to algae/aquatic plants | : | EC50 (Desmodesmus subspicatus (green algae)): 0.022 mg/l<br>Exposure time: 72 h |

Method: OECD Test Guideline 201
Remarks: Fresh water

NOEC (Desmodesmus subspicatus (green algae)): 0.0032 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.41 mg/l
Exposure time: 28 Days
Method: OECD Test Guideline 204
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.56 mg/l
Exposure time: 21 Days
Method: OECD Test Guideline 211
Remarks: Fresh water

Toxicity to microorganisms : EC50 (activated sludge): 3,080 mg/l
Exposure time: 0.5 h
Method: OECD Test Guideline 209

**carbendazim:**

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 0.61 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.22 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (microalgae)): 2.7 mg/l
Exposure time: 72 h

**3-iodo-2-propynyl butylcarbamate:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.067 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.16 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: yes
Remarks: Fresh water

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 0.022 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Fresh water

NOEC (Desmodesmus subspicatus (green algae)): 0.0046 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Fresh water

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.0084 mg/l
Exposure time: 35 d
Method: OECD Test Guideline 210
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.05 mg/l
Exposure time: 21 d
Remarks: Fresh water

Toxicity to microorganisms : EC50 (activated sludge): 44 mg/l
Exposure time: 3 h

**Persistence and degradability**

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

Biodegradability : aerobic
Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: yes

**carbendazim:**

Biodegradability : Result: Not readily biodegradable.

**3-iodo-2-propynyl butylcarbamate:**

Biodegradability : Concentration: 0.02 mg/l
Biodegradation: > 80 %
Exposure time: 1 d
Method: OECD Test Guideline 302B
Remarks: IPBC is rapidly transformed in the environment to PBC

Result: Readily biodegradable.

**Bioaccumulative potential**

**Components:**

**3-(3,4)-Dichlorophenyl)-1,1-dimethylurea:**

Bioaccumulation : Bioconcentration factor (BCF): 57.2

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | log Pow: 2.89<br>Method: Calculated value |

**carbendazim:**

| | | |
|---|---|---|
| Bioaccumulation | : | Bioconcentration factor (BCF): 27 |
| Partition coefficient: n-octanol/water | : | log Pow: 1.51 |

**3-iodo-2-propynyl butylcarbamate:**

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | log Pow: 2.8<br>Method: measured |

**Mobility in soil**

No data available

**Other adverse effects**

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

| | | |
|---|---|---|
| RCRA - Resource Conservation and Recovery Authorization Act | : | If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24) |
| Waste from residues | : | The generation of waste should be avoided or minimized wherever possible.<br>This material and its container must be disposed of in a safe way.<br>Empty containers retain product residue; observe all precautions for product.<br>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.<br>Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls. |

## SECTION 14. TRANSPORT INFORMATION

**International Regulations**

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 3082 |
| Proper shipping name | : | Environmentally hazardous substance, liquid, n.o.s. |

(DIURON, CARBENDAZIM)

Class : 9
Packing group : III
Labels : 9
:

Packing instruction (cargo aircraft) : 964 : 450.00 L
Packing instruction (passenger aircraft) : 964 : 450.00 L
Environmentally hazardous : yes

**IMDG-Code**

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(DIURON, CARBENDAZIM)
Class : 9
Packing group : III
Labels : 9
:

EmS Code : F-A, S-F
Marine pollutant : yes

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

Not applicable for product as supplied.

**Domestic regulation**

**49 CFR**

UN/ID/NA number : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(CARBENDAZIM, DIURON)
Class : 9
Packing group : III
Labels : 9

: 


ERG Code : 171
RQ : 112.23 lb
Marine pollutant : yes

**Hazard and Handling Notes.**
Environmentally hazardous substance., Irritating to the eyes., Keep away from foodstuffs, acids and alkalis

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| carbendazim | 10605-21-7 | 10 | 112 |
| 3-(3,4)-Dichlorophenyl)-1,1-dimethylurea | 330-54-1 | 100 | 680 |

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Respiratory or skin sensitization
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Serious eye damage or eye irritation

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| 3-(3,4)-Dichlorophenyl)-1,1-dimethylurea | 330-54-1 | >= 10 - < 20 % |

| | | |
|---|---|---|
| 3-iodo-2-propynyl butylcarbamate | 55406-53-6 | >= 1 - < 5 % |

**US State Regulations**

**Massachusetts Right To Know**

| | | |
|---|---|---|
| 3-(3,4)-Dichlorophenyl)-1,1-dimethylurea | 330-54-1 | >= 10 - < 20 |
| kaolin | 1332-58-7 | > 1 |

**Pennsylvania Right To Know**

| | | |
|---|---|---|
| water | 7732-18-5 | > 1 |
| 3-(3,4)-Dichlorophenyl)-1,1-dimethylurea | 330-54-1 | >= 10 - < 20 |
| carbendazim | 10605-21-7 | >= 5 - < 10 |
| kaolin | 1332-58-7 | > 1 |
| ammonium chloride | 12125-02-9 | < 0.1 |

**California Prop. 65**

WARNING: This product can expose you to chemicals including 3-(3,4)-Dichlorophenyl)-1,1-dimethylurea, o-phenylenediamine, 3,4,3',4'-tetrachloroazobenzene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

**TSCA inventory**

TSCA : This product is regulated under the United States Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

**FIFRA information**

EPA registration number : 39967-160

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

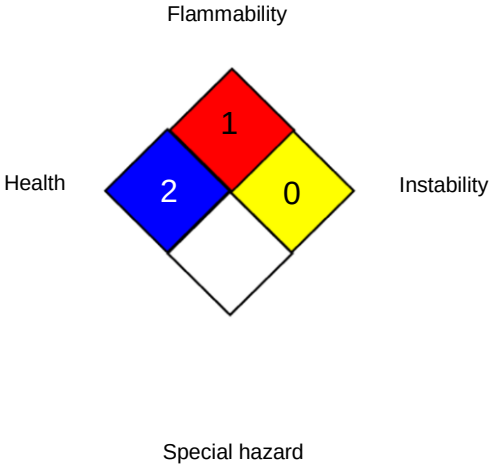
Signal Word : CAUTION

Hazard Statements : Harmful if swallowed. Causes moderate eye irritation.

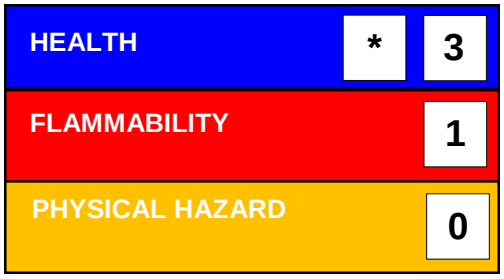
## SECTION 16. OTHER INFORMATION

**Further information**

**NFPA 704:**




**HMIS® IV:**




HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances;

(Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 06/11/2021

The data contained in this Safety Data Sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered to be a guidance for processing and does not contain any warranty or quality specification. The 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, unless specified in the text. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.