

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

SECTION 1. IDENTIFICATION

Product name : PREVENTOL A 12-TK 48
Product code : 000000000062025001
EPA registration number : 39967-151

Manufacturer or supplier's details

Company : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15275-1112

Responsible Department : (800) LANXESS
(412) 809-1000
lanxesshes@lanxess.com

Emergency telephone : CHEMTREC (800) 424-9300 or
(703) 527-3887 (Outside U.S.A) and mention CCN12916.
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)

Flammable liquids : Category 4
Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 4
Skin irritation : Category 2
Serious eye damage : Category 1
Skin sensitization : Category 1
Reproductive toxicity : Category 1B
Specific target organ toxicity : Category 3 (Respiratory system)

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

- single exposure

Specific target organ toxicity : Category 2 (larynx)
- repeated exposure (Inhalation)

GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : Combustible liquid.
Harmful if swallowed or if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.
May damage the unborn child.
May cause damage to organs (larynx) through prolonged or repeated exposure if inhaled.

Precautionary Statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
Do not breathe mist or vapors.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

rinsing. Immediately call a POISON CENTER/ doctor.
IF exposed or concerned: Get medical advice/ attention.
If skin irritation or rash occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
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)
(2-methoxymethylethoxy)propanol	34590-94-8	>= 30 - < 50
1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole	60207-90-1	>= 30 - < 50
3-iodo-2-propynyl butylcarbamate	55406-53-6	>= 10 - < 20

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.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Get medical attention immediately.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If unconscious, place in recovery position and get medical attention immediately.
Maintain open airway.
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained per-

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

sonnel.

- In case of skin contact : Wash off with soap and water.
Remove contaminated clothing and shoes.
Continue to rinse for at least 20 minutes.
Get medical attention if symptoms occur.
Wash contaminated clothing before reuse.
- In case of eye contact : Get medical attention immediately.
In case of contact, flush eyes with plenty of water for at least 30 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated.
Remove contact lenses, if present and easy to do. Continue rinsing.
Chemical burns must be treated promptly by a physician.
- 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 : Acute overexposure to this product may cause dizziness, headache, drowsiness, malaise, abdominal pain.
Eye: Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage.
Skin: Causes irritation with symptoms of reddening, itching, and swelling.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.
Adverse symptoms sometimes include the following:
Effects on fetal development.
- Effects : Harmful if swallowed or if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause respiratory irritation.
May damage the unborn child.
May cause damage to organs through prolonged or repeated exposure if inhaled.

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version	Revision Date:	SDS Number:	Date of last issue: 10/22/2020
2.0	10/08/2024	203000014006	Country / Language: US / EN

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
Combustible liquid.
In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Nitrogen oxides (NO_x)
Halogenated compounds

Further information : Use a water spray to cool fully closed containers.
Move containers from fire if this can be done without risk.
Fight fire remotely due to the risk of explosion.
If this is impossible, withdraw from area and allow fire to burn.
No action shall be taken involving any personal risk or without suitable training.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
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.
Put on appropriate personal protection equipment.
Do not touch or walk through spilled material.
Evacuate unnecessary personnel.
Keep unnecessary and unprotected personnel from entering.
Provide adequate ventilation.

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version Revision Date: SDS Number: Date of last issue: 10/22/2020
2.0 10/08/2024 203000014006 Country / Language: US / EN

- Do not breathe vapors, aerosols.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so.
Move containers from spill area.
Wash spillages into an effluent treatment plant or proceed as follows.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Dispose of wastes in an approved waste disposal facility.
Do not allow into the sewerage system, surface waters or groundwater or into the soil.
Contaminated absorbent material may pose the same hazard as the spilled product.
Non-sparking tools should be used.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition.
- 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.
Avoid inhalation, ingestion and contact with skin and eyes.
Use only with adequate ventilation.
Persons with a history of skin sensitization to this product should not be employed in any process in which this product is used.
Use only with adequate ventilation/personal protection.
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 containers sealed until ready for use.

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

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 : < 104 °F / < 40 °C

Further information on storage stability : Stable under recommended storage conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
(2-methoxymethylethoxy)propanol	34590-94-8	TWA	100 ppm 600 mg/m ³	OSHA Z-1

Engineering measures : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Use explosion-proof ventilating equipment.

Personal protective equipment

Respiratory protection : In the case of vapor formation use a respirator with an approved filter.

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.
NIOSH approved, air-purifying organic vapor respirator.

Hand protection

Material : Fluorinated rubber - FKM
Wearing time : < 60 min

Material : Polyvinyl chloride - PVC
Wearing time : < 60 min

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

Material : Butyl rubber - IIR
Wearing time : < 60 min

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves. 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 : Wear suitable protective clothing.
Chemical resistant apron
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.
Appropriate techniques should be used to remove potentially contaminated clothing.
Wash contaminated clothing before reusing.
Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Physical state : liquid

Color : yellow to brown

Odor : No data available

Odor Threshold : No data available

pH : Not applicable

Melting point/ range : No data available

Boiling point/boiling range : No data available

Flash point : 171 °F / 77 °C
Method: DIN EN ISO 2719/A, closed cup

Evaporation rate : No data available

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

Incompatible materials : No specific data.
Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity : LD50 (Rat, female): 1,098 mg/kg
Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 2.08 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat, female): > 2,000 mg/kg
Method: OECD Test Guideline 402

Components:

(2-methoxymethylethoxy)propanol:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: No

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.667 mg/l
Exposure time: 7 h
Test atmosphere: vapor
Method: OECD Test Guideline 403
GLP: No
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Dosage caused no mortality
Highest producible concentration.

Acute dermal toxicity : LD50 (Rabbit, male): 9,510 mg/kg
Method: OECD Test Guideline 402
GLP: No

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

Acute oral toxicity : LD50 (Rat): 1,517 mg/kg

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

Acute inhalation toxicity : LC50 (Rat): > 5.8 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Highest producible concentration.

Acute dermal toxicity : LD50 (Rat): > 4,000 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

Causes skin irritation.

Product:

Result : Irritating to skin.
Remarks : Moderate skin irritation

Components:

(2-methoxymethylethoxy)propanol:

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

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

Remarks : Mild skin irritation
Based on available data, the classification criteria are not met.

3-iodo-2-propynyl butylcarbamate:

Species : Rabbit

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version Revision Date: SDS Number: Date of last issue: 10/22/2020
2.0 10/08/2024 203000014006 Country / Language: US / EN

Method : OECD Test Guideline 404
Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : Moderate eye irritation

Components:

(2-methoxymethylethoxy)propanol:

Result : Irritating to eyes.

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

Remarks : Mild eye irritation
Based on available data, the classification criteria are not met.

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 due to lack of data.

Components:

(2-methoxymethylethoxy)propanol:

Routes of exposure : Skin contact
Species : Humans
Result : Not a skin sensitizer.
GLP : No
Remarks : Patch test on human volunteers did not demonstrate sensitization properties.

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

Routes of exposure : Skin contact
Species : Guinea pig
Result : May cause sensitization by skin contact.

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

3-iodo-2-propynyl butylcarbamate:

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

Germ cell mutagenicity

Not classified due to lack of data.

Components:

(2-methoxymethylethoxy)propanol:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: Yes

Test Type: Ames test
Test system: Escherichia coli
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: Yes

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster lung cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: Yes

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: No information available.
Remarks: Test results on an analogous substance/product.

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

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

Remarks: Not mutagenic in a standard battery of genetic toxicology tests.

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

ecological tests.

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

Not classified due to lack of data.

Components:

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

Remarks : Animal testing did not show any carcinogenic effects.

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 the unborn child.

Components:

(2-methoxymethylethoxy)propanol:

Effects on fertility : Species: Rat, male and female
Application Route: inhalation (vapor)
General Toxicity Parent: NOAEC: 300 ppm
General Toxicity F1: NOAEC: 1,000 ppm
General Toxicity F2: NOAEC: 1,000 ppm
Fertility: NOAEC Parent: 1,000 parts per million
Method: OECD Test Guideline 416
Result: Animal testing did not show any effects on fertility.
GLP: Yes
Remarks: Test results on an analogous substance/product.

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

Effects on fetal development : Test Type: Embryo-fetal development
Species: Rat, female
Application Route: inhalation (vapor)
Dose: 50 - 150 - 300 parts per million
General Toxicity Maternal: NOAEC: 300 ppm
Developmental Toxicity: NOAEC: 300 ppm
Embryo-fetal toxicity.: NOAEC: 300 ppm
Result: No teratogenic effects.
GLP: Yes

Test Type: Embryo-fetal development
Species: Rabbit, female
Application Route: inhalation (vapor)
Dose: 50 - 150 - 300 parts per million
General Toxicity Maternal: NOAEC: 300 ppm
Developmental Toxicity: NOAEC: 300 ppm
Embryo-fetal toxicity.: NOAEC: 300 ppm
Result: No teratogenic effects.
GLP: Yes

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

Reproductive toxicity - Assessment : Clear evidence of adverse effects on development, based on animal experiments.

STOT-single exposure

May cause respiratory irritation.

Product:

Routes of exposure : Inhalation
Target Organs : Respiratory system
Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Components:

(2-methoxymethylethoxy)propanol:

Assessment : May cause drowsiness or dizziness., May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs (larynx) through prolonged or repeated exposure if inhaled.

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

Components:

3-iodo-2-propynyl butylcarbamate:

Routes of exposure : Inhalation
Target Organs : larynx
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Repeated dose toxicity

Components:

(2-methoxymethylethoxy)propanol:

Species : Rat, male and female
NOAEL : 1000 mg/kg
Application Route : Oral
Exposure time : 28 d
Dose : 40 - 200 - 1000 mg/kg bw/d
GLP : Yes
Remarks : Subacute toxicity

Species : Rat, male and female
NOAEL : $\geq 1212 \text{ mg/m}^3$
Application Route : Inhalation
Test atmosphere : vapor
Exposure time : 90 d
Dose : 91 - 303 - 1212 mg/m³
Method : OECD Test Guideline 413
GLP : Yes
Remarks : Subchronic toxicity

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

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version Revision Date: SDS Number: Date of last issue: 10/22/2020
2.0 10/08/2024 203000014006 Country / Language: US / EN

Toxicity to microorganisms : EC10 (*Pseudomonas putida*): 4,168 mg/l
End point: Growth rate
Exposure time: 18 h
GLP: Yes

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 4.3 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other : EC50 (*Daphnia magna* (Water flea)): 10.2 mg/l
aquatic invertebrates Exposure time: 48 h
Method: OECD Test Guideline 202

EC50 (*Mysidopsis bahia* (opossum shrimp)): 0.51 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic : EC50 (*Desmodesmus subspicatus* (green algae)): 0.76 mg/l
plants Exposure time: 72 h
Remarks: Fresh water

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 : EC50 (*Daphnia magna* (Water flea)): 0.16 mg/l
aquatic invertebrates Exposure time: 48 h
Method: OECD Test Guideline 202
GLP: Yes
Remarks: Fresh water

Toxicity to algae/aquatic : EC50 (*Desmodesmus subspicatus* (green algae)): 0.022 mg/l
plants 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 tox- : NOEC (*Pimephales promelas* (fathead minnow)): 0.0084 mg/l
icity) Exposure time: 35 d
Method: OECD Test Guideline 210

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

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:

(2-methoxymethylethoxy)propanol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 75 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: Yes

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life (Fresh water): 28 - 64 d (25 °C)

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:

(2-methoxymethylethoxy)propanol:

Bioaccumulation : Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Partition coefficient: n-octanol/water : log Pow: 0.004 (77 °F / 25 °C)
Method: OECD Test Guideline 107

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole:

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version	Revision Date:	SDS Number:	Date of last issue: 10/22/2020
2.0	10/08/2024	203000014006	Country / Language: US / EN

Partition coefficient: n-octanol/water : log Pow: 3.72
Method: OECD Test Guideline 107

3-iodo-2-propynyl butylcarbamate:

Partition coefficient: n-octanol/water : log Pow: 2.8
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.
This material and its container must be disposed of in a safe way.
Empty containers retain product residue; observe all precautions for product.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls.

SECTION 14. TRANSPORT INFORMATION

International Regulations

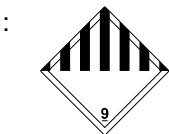
IATA-DGR

UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s. (PROPICONAZOLE, 3-IODO-2-PROPINYL-N-BUTYLCARBAMATE)
Class : 9
Packing group : III
Labels : 9

SAFETY DATA SHEET

PREVENTOL A 12-TK 48

Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN



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
UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PROPICONAZOLE, 3-iodo-2-propinyl-N-butylcarbamate)

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. (PROPICONAZOLE, 3-iodo-2-propinyl-N-butylcarbamate)

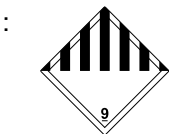
Class : 9
Packing group : III
Labels : 9

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version: 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN



ERG Code : 171
Marine pollutant : yes



Hazard and Handling Notes.

Environmentally hazardous substance.

Risk of serious damage to eyes

Keep separated from foodstuffs

The U.S. DOT regulations in 49 CFR 172.102 permit this material to ship as an Environmentally Hazardous Substance, Class 9, using Special Provision 146.

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

This material does not contain any components with a CERCLA RQ.

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 : Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Respiratory or skin sensitization
Reproductive toxicity
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

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

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole 60207-90-1 >= 30 - < 50 %

3-iodo-2-propynyl butylcarbamate 55406-53-6 >= 10 - < 20 %

US State Regulations

Massachusetts Right To Know

(2-methoxymethylethoxy)propanol 34590-94-8 >= 30 - < 50

Pennsylvania Right To Know

(2-methoxymethylethoxy)propanol 34590-94-8 >= 30 - < 50

1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole 60207-90-1 >= 30 - < 50

3-iodo-2-propynyl butylcarbamate 55406-53-6 >= 10 - < 20

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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 : 39967-151

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

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



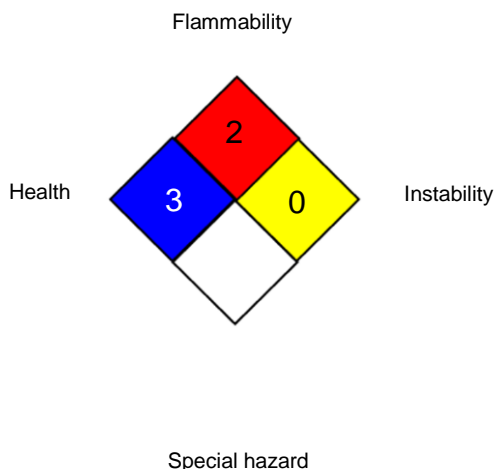
Version 2.0 Revision Date: 10/08/2024 SDS Number: 203000014006 Date of last issue: 10/22/2020
Country / Language: US / EN

Hazard Statements : Causes moderate eye irritation. Harmful if swallowed, in contact with skin or if inhaled. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



HMIS® IV:

HEALTH	*	3
FLAMMABILITY		2
PHYSICAL HAZARD		0

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

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
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);

SAFETY DATA SHEET

PREVENTOL A 12-TK 48



Version	Revision Date:	SDS Number:	Date of last issue: 10/22/2020
2.0	10/08/2024	203000014006	Country / Language: US / EN

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 : 10/08/2024

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.

Relevant changes from the previous version are marked on the left side of the Safety Data Sheet with a black double bar in appropriate places.