SECTION 1. IDENTIFICATION

Product name : PREVENTOL D 7 CF
Material number : 57548922
Recommended use : Biocide for industrial application

Manufacturer or supplier's details
Supplier : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh PA 15275-1112
USA
Telephone : +1800LANXESS
+14128091000 (international)
Emergency telephone : CHEMTREC (800) 424 9300
International (703) 527 3887
Lanxess Emergency Phone (800) 410-3063

SECTION 2. HAZARDS IDENTIFICATION

Skin corrosion : Category 1A
Serious eye damage : Category 1
Skin sensitization : Category 1
Specific target organ systemic toxicity - single exposure (Inhalation) : Category 1 (Respiratory Tract)

GHS label elements
Hazard pictograms : 
[Image]
Signal Word : Danger
Hazard Statements : Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Causes damage to organs (Respiratory Tract) if inhaled.
Precautionary Statements : Prevention:
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 SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
IF exposed: Call a POISON CENTER or doctor/ physician. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.

Storage:
Store locked up.

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

Hazard Not Otherwise Classified (HNOC)
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>magnesium nitrate</td>
<td>10377-60-3</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>5-chloro-2-methyl-3(2H)-Isothiazolone</td>
<td>26172-55-4</td>
<td>&gt;= 1 - &lt; 3</td>
</tr>
<tr>
<td>2-methyl-3(2H)-Isothiazolone</td>
<td>2682-20-4</td>
<td>&gt;= 0.1 - &lt; 1</td>
</tr>
</tbody>
</table>

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:
- If inhaled, remove to fresh air.
- If unconscious, place in recovery position and seek medical advice.
- If not breathing, if breathing is irregular or respiratory arrest occurs, provide artificial respiration, or oxygen by a trained professional.
professional, using a pocket type respirator. Get medical attention if symptoms occur.

In case of skin contact: Get medical attention immediately. In case of contact, immediately flush skin with plenty of water for at least 30 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Chemical burns must be treated promptly by a physician.

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: If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed

Symptoms: Skin: Reddening, burning, and possible permanent damage. Eye: Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage. Once sensitized, an allergic skin reaction may occur with reddening, swelling, and rash when subsequently exposed to very low levels. Inhalation: Causes respiratory tract burns.

Effects: May cause an allergic skin reaction. Causes serious eye damage. Causes damage to organs if inhaled. Causes severe burns.

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. In a fire or if heated, a pressure increase will occur and the container may burst. Water runoff from fire fighting may be corrosive. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
Hazardous combustion products:
- Nitrogen oxides (NOx)
- Metal oxides
- Carbon dioxide (CO2)
- Carbon monoxide
- Sulfur oxides
- Halogenated compounds

Further information:
- Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
- No action shall be taken involving any personal risk or without suitable training.

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 personnel to safe areas.
- Keep unnecessary and unprotected personnel from entering.

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.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling:
- Do not breathe vapors/dust.
- Avoid contact with skin and eyes.
- 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. Use only with adequate ventilation. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Persons with a history of skin sensitization to this product should not be employed in any process in which this product is used.

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.

Further information on storage stability: No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters
Contains no substances with occupational exposure limit values.

Personal protective equipment
Respiratory protection: NIOSH approved, air-purifying organic vapor respirator. 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.

Hand protection
Material: Polychloroprene - CR
Wearing time: < 60 min

Material: Polyvinyl chloride - PVC
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 Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection: Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>4 - 6</td>
</tr>
<tr>
<td></td>
<td>Concentration: 1 %</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>30 °F (-1 °C)</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>212 °F (100 °C) (1,013 hPa)</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 212 °F (&gt; 100 °C) Method: closed cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit / Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.024 g/cm³ (68 °F (20 °C))</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Water solubility: miscible</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>&gt; 1112 °F (&gt; 600 °C)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Viscosity
  Viscosity, dynamic : 1.244 mPa.s

Explosive properties : No data available

Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-
tions : Under normal conditions of storage and use, hazardous reac-
tions will not occur.

Conditions to avoid : No data available

Incompatible materials : No specific data.

Hazardous decomposition products : No data available

SECTION 11. TOXICOLOGICAL INFORMATION

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

Information on likely routes of exposure

Inhalation
Eye contact
Skin contact
Ingestion

Acute toxicity
Not classified based on available information.

Product:

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

Acute inhalation toxicity : Acute toxicity estimate: 66.05 mg/l
  Exposure time: 4 h
  Test atmosphere: dust/mist
  Method: Calculation method

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Components:

magnesium nitrate:

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg
Method: OECD Test Guideline 423
GLP: yes

Acute dermal toxicity: LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes

5-chloro-2-methyl-3(2H)-Isothiazolone:
Acute oral toxicity: LD50 (Rat): 481 mg/kg
Acute inhalation toxicity: LC50 (Rat): 1.23 mg/l
   Exposure time: 4 h
   Test atmosphere: dust/mist
Acute dermal toxicity: LD50 (Rat): > 1,008 mg/kg

2-methyl-3(2H)-Isothiazolone:
Acute oral toxicity: LD50 (Rat, female): 183 mg/kg
Acute inhalation toxicity: LC50 (Rat): 0.53 mg/l
   Exposure time: 4 h
   Test atmosphere: dust/mist
Acute dermal toxicity: LD50 (Rabbit, male): 218 mg/kg

Skin corrosion/irritation
Causes severe burns.

Product:
Result: Causes severe burns.

Components:
magnesium nitrate:
Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation

5-chloro-2-methyl-3(2H)-Isothiazolone:
Species: Rabbit
Method: OECD Test Guideline 404
Result: Causes burns.

2-methyl-3(2H)-Isothiazolone:
Result: Corrosive, category 1C - where responses occur after exposures between 1 hour and 4 hours and observations up to 14 days.
Serious eye damage/eye irritation
Causes serious eye damage.

**Product:**
Result: Corrosive

**Components:**

**magnesium nitrate:**
Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405
GLP: yes

**5-chloro-2-methyl-3(2H)-Isothiazolone:**
Species: Rabbit
Result: Risk of serious damage to eyes.
Method: OECD Test Guideline 405

**2-methyl-3(2H)-Isothiazolone:**
Remarks: Risk of serious damage to eyes.

**Respiratory or skin sensitization**

**Skin sensitization**
May cause an allergic skin reaction.

**Respiratory sensitization**
Not classified based on available information.

**Components:**

**magnesium nitrate:**
Routes of exposure: Skin contact
Species: Mouse
Method: OECD Test Guideline 429
Result: Did not cause sensitization on laboratory animals.
GLP: yes

**5-chloro-2-methyl-3(2H)-Isothiazolone:**
Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: May cause sensitization by skin contact.
Remarks: Sensitizer

**2-methyl-3(2H)-Isothiazolone:**
Routes of exposure: Skin contact
Species: Mouse
Method: OECD Test Guideline 429
Result: May cause sensitization by skin contact.

**Germ cell mutagenicity**
Not classified based on available information.

**Components:**

**magnesium nitrate:**
Genotoxicity in vitro:
- Test system: Bacteria
  - Metabolic activation: with and without metabolic activation
  - Method: OECD Test Guideline 471
  - Result: negative
  - GLP: yes

Test system: Mammalian-Human
- Metabolic activation: with and without metabolic activation
- Method: OECD Test Guideline 473
- Result: negative
- GLP: yes

Test system: Mammalian-Animal
- Metabolic activation: with and without metabolic activation
- Method: OECD Test Guideline 476
- Result: negative
- GLP: yes

**5-chloro-2-methyl-3(2H)-Isothiazolone:**
Genotoxicity in vitro:
- Test system: Bacteria
  - Metabolic activation: with and without metabolic activation
  - Method: OECD Test Guideline 471
  - Result: positive

Genotoxicity in vivo:
- Test Type: Micronucleus test
  - Species: Mouse
  - Application Route: Oral
  - Result: negative

**2-methyl-3(2H)-Isothiazolone:**
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 based on available information.

**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
Not classified based on available information.

Components:

**Magnesium nitrate:**
Effects on fertility : Species: Rat, male and female
  Application Route: Oral
  Dose: >= 1500 milligram per kilogram
  Duration of Single Treatment: 28 d
  General Toxicity Parent: NOAEL: >= 1,500 mg/kg body weight
  Method: OECD Test Guideline 422
  GLP: yes

Effects on fetal development : Species: Rat, male and female
  Application Route: Oral
  Dose: >= 1500 milligram per kilogram
  Duration of Single Treatment: 28 d
  Developmental Toxicity: NOAEL: >= 1,500 mg/kg body weight
  Method: OECD Test Guideline 422
  GLP: yes

**5-chloro-2-methyl-3(2H)-Isothiazolone:**
Effects on fertility : Species: Rat, male and female
  Application Route: Oral
  Dose: 72 milligram per kilogram
  Method: OECD Test Guideline 415
  GLP: yes
  Remarks: No known significant effects or critical hazards.

Effects on fetal development : Species: Rat, female
  Application Route: Oral
  Dose: > 139 milligram per kilogram
  Duration of Single Treatment: 20 d
  Frequency of Treatment: 9 daily
  Result: No teratogenic potential.

**STOT-single exposure**
Causes damage to organs (Respiratory Tract) if inhaled.
Product:
Routes of exposure: Inhalation
Target Organs: Respiratory Tract
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

STOT-repeated exposure
Not classified based on available information.

Repeated dose toxicity

Components:

magnesium nitrate:
Species: Rat, male and female
NOAEL: >= 1,500 mg/kg
Application Route: Oral
Exposure time: 28 d
Dose: >= 1500 mg/kg
Method: OECD Test Guideline 422
Remarks: Subacute toxicity

5-chloro-2-methyl-3(2H)-isothiazolone:
Species: Rat, male and female
NOAEL: > 18.75 mg/kg
Application Route: Dermal
Exposure time: 90 d
Dose: > 18.75 mg/kg
Remarks: Chronic toxicity

Aspiration toxicity
Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:
magnesium nitrate:
Toxicity to fish: LC50 (Poecilia reticulata (guppy)): 1,378 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Fresh water

Toxicity to daphnia and other aquatic invertebrates: LC50 (Daphnia magna (Water flea)): 490 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 203
Remarks: Fresh water

Toxicity to algae: EC50 (algae): > 1,700 mg/l
Exposure time: 10 Days

Print Date: 07/01/2019
Method: OECD Test Guideline 203
Remarks: salt water

5-chloro-2-methyl-3(2H)-isothiazolone:
Toxicity to fish: LC50 (Fish): 0.19 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia): 0.84 mg/l
Exposure time: 48 h

Toxicity to fish (Chronic toxicity): LC50 (Salmo gairdneri): 0.14 mg/l
Exposure time: 6 d

2-methyl-3(2H)-isothiazolone:
Toxicity to fish: LC50 (Danio rerio (zebra fish)): > 150 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 0.87 mg/l
Exposure time: 48 h

Toxicity to algae: EC50 (Pseudokirchneriella subcapitata (microalgae)): 0.157 mg/l
Exposure time: 72 h
NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.0104 mg/l
Exposure time: 96 h

M-Factor (Chronic aquatic toxicity): 1

Toxicity to microorganisms: EC50 (activated sludge): 31.7 mg/l
Exposure time: 3 h

Persistence and degradability

Components:
magnesium nitrate:
Biodegradability: Result: The methods for determining the biological degradability are not applicable to inorganic substances.

2-methyl-3(2H)-isothiazolone:
Biodegradability: Result: Not readily biodegradable.

Bioaccumulative potential

Components:
2-methyl-3(2H)-isothiazolone:
Partition coefficient: n-: log Pow: -0.32
Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

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)

Disposal methods: 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. Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Domestic regulation

DOT
UN/ID/NA number: UN 3265
Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)
Class: 8
Packing group: II
Labels: 8

Marine pollutant: no

International Regulations

IATA-DGR
UN/ID No.: UN 3265
Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. 
(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)

Class: 8
Packing group: II
Labels: 8

Packing instruction (cargo aircraft): 855: 30.00 L
Packing instruction (passenger aircraft): 851: 1.00 L
Environmentally hazardous: no

IMDG-Code
UN number: UN 3265
Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. 
(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE)
Class: 8
Packing group: II
Labels: 8

Marine pollutant: no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

CERCLA
None

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: Respiratory or skin sensitization
Serious eye damage or eye irritation
Skin corrosion or irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
US State Regulations

Massachusetts Right To Know
magnesium nitrate 10377-60-3 >= 1 - < 5

Pennsylvania Right To Know
Water 7732-18-5 > 1
magnesium nitrate 10377-60-3 >= 1 - < 5

California Prop. 65
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive defects.

TSCA inventory
TSCA: On TSCA Inventory, This product is subject under TSCA 5(a) to Proposed Significant New Use Restrictions (SNUR).

TSCA list
No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:
5-chloro-2-methyl-3(2H)-isothiazolone 26172-55-4

SECTION 16. OTHER INFORMATION

Further information

NFPA: 1 0 3

HMIS® IV:

FLAMMABILITY 1
PHYSICAL HAZARD 0
HEALTH / 3

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.

LANXESS' method of hazard communication is comprised of Product Labels and Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS as a customer service.

Revision Date: 05/13/2019

Print Date: 07/01/2019
This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of our knowledge. The information provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge, information and belief at the date of its publication. We assume no legal responsibility for use of or reliance upon the information in this SDS.