

Material Safety Data Sheet

LANXESS
Energizing Chemistry

1. Product and company identification

Product name : Preventol L 45

Supplier/Manufacturer : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112
USA

For information: US/Canada (800) LANXESS
International +1 412 809 1000

In case of emergency : Chemtrec (800) 424-9300
International (703) 527-3887
Lanxess Emergency Phone (800) 410-3063.

EPA Registration Number: : 67071-6-39967

Material Number : 06470920

2. Hazards identification

Physical state : Liquid.

Odor : Characteristic.

Color : Yellow. [Light]

Emergency overview : DANGER!
COMBUSTIBLE LIQUID AND VAPOR. MAY BE FATAL IF SWALLOWED. CAUSES RESPIRATORY TRACT, DIGESTIVE TRACT, EYE AND SKIN BURNS. USE COLD WATER SPRAY TO COOL FIRE AND EXPOSED CONTAINERS TO MINIMIZE THE RISK OF RUPTURE. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE ALLERGIC SKIN REACTION.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Medical conditions aggravated by over-exposure : Pre-existing skin disorders may be aggravated by over-exposure to this product.

Potential acute health effects / Over-exposure signs/symptoms

Inhalation : Toxic by inhalation. Corrosive to the respiratory system.

Ingestion : Very toxic if swallowed. Corrosive to the digestive tract. Causes burns.

Skin : Corrosive to the skin. Causes burns. Toxic in contact with skin. May cause sensitization by skin contact. Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.

Eyes : Corrosive to eyes. Causes burns. Corrosive with symptoms of reddening, tearing, swelling, burning, and possible permanent damage.

Potential chronic health effects

Chronic effects : Once sensitized, an allergic skin reaction may occur with reddening, swelling, and rash when subsequently exposed to very low levels. Repeated or prolonged exposure may cause injury to the nervous system, kidneys, and liver.

Carcinogenicity : No carcinogenic substances as defined by IARC, NTP and/or OSHA.

3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

<u>Name</u>	<u>CAS number</u>	<u>%</u>
2-Octyl-4-isothiazolinone	26530-20-1	40 - 50

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Call physician 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.
- Skin contact** : Wash off with polyethylene glycol and afterwards with plenty of water. If polyethylene glycol is not available, wash off with plenty of soap and water. Call physician immediately. Immediately remove contaminated clothing and shoes. Wash clothing and shoes before reuse.
- Inhalation** : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration using a pocket mask type resuscitator. Call physician immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting. If conscious, drink two glasses of water. Call physician immediately.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

Extinguishing media

- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Vapors may spread long distances and ignite. Vapors or mist may be a fire and explosion hazard when exposed to high temperature or ignition. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Do not breathe vapor or mist.
- Spill and Leak Procedures.** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product. Cover spill with inert material (e.g. dry sand or earth) and collect for proper disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
- Storage temperature:** : Store between the following temperatures: 0 to 40°C

8. Exposure controls/personal protection

No exposure limit value known.

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Hygiene measures** : General dilution and local exhaust as necessary to control airborne vapors, mists, dusts, and thermal decomposition products below appropriate airborne concentration standards/guidelines.
- Personal protection**
- Respiratory** : NIOSH approved, air-purifying respirator with organic vapor cartridges and N-95 filters
- Hands** : Use chemical-resistant, impervious gloves. Recommended: Nitrile rubber gloves.
- Eyes** : When directly handling liquid product, eye protection is required. Examples of eye protection include a chemical safety goggle, or chemical safety goggle in combination with a full face shield when there is a greater risk of splash.
- Skin** : Wear cloth work clothing including long pants and long-sleeved shirts. Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact. Additional body garments should be used to avoid exposed skin surfaces (e.g. sleevelets, apron, disposable suit etc.), based on the task being performed.

9. Physical and chemical properties

Physical state : Liquid.
Flash point : Closed cup: 93°C (199.4°F)
Flammable limits : Lower: 2.6%
Upper: 12.6%
Color : Yellow. [Light]
Odor : Characteristic.
pH : 2.4 [Conc. (% w/w): 10%]
Boiling/condensation point : 184°C (363.2°F)
Melting/freezing point : -10°C (14°F)
Density : 1.03 g/cm³ [20°C (68°F)]
Vapor pressure : not available
Viscosity : Dynamic (room temperature): 100 mPa·s (100 cP)

10. Stability and reactivity

Chemical stability : The product is stable.
Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid : Reactive or incompatible with the following materials:
oxidizing materials
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Preventol L 45	LC50 Inhalation Dusts and mists	Rat	1.25 mg/l	4 hours
Preventol L 45	LD50 Dermal	Rabbit	690 mg/kg	-
Preventol L 45	LD50 Oral	Rat	760 mg/kg	-

Irritation/Corrosion

Skin : corrosive (Rabbit)
Eyes : corrosive (Rabbit)

Sensitizer

Product/ingredient name	Route of exposure	Species	Result
Preventol L 45	skin	Guinea pig	Sensitizing

Carcinogenicity

Product/ingredient name	CAS #	IARC	NTP	OSHA
2-Octyl-4-isothiazolinone	26530-20-1	Not classified.	Not classified.	Not classified.

12. Ecological information

Aquatic ecotoxicity

<u>Product/ingredient name</u>	<u>Result</u>	<u>Species</u>	<u>Exposure</u>
2-Octyl-4-isothiazolinone	Acute EC50 0.32 mg/l	Daphnia - Daphnia magna	48 hours
	Acute IC50 0.004 mg/l	Algae - Selenastrum capricornutum	72 hours
	Acute LC50 0.18 mg/l	Fish - Lepomis macrochirus	96 hours
	Acute LC50 0.047 mg/l	Fish - Oncorhynchus mykiss	96 hours




Bioaccumulative potential

<u>Product/ingredient name</u>	<u>LogP_{ow}</u>	<u>BCF</u>	<u>Potential</u>
2-Octyl-4-isothiazolinone	2.9	-	low







13. Disposal considerations

- Waste disposal** : Waste disposal should be in accordance with existing federal, state, provincial and/or local environmental controls. The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way.
- Empty Container Precautions.** : Do not heat or cut container with electric or gas torch. Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty. Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse container. Observe label precautions.
- RCRA classification** : : 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)

14. Transport information

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Classes</u>	<u>PG*</u>	<u>Label</u>	<u>Additional information</u>
DOT Classification	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (2-OCTYL-4-ISOTHIAZOLINONE)	8 (6.1)	II	  	B3, IB2, T7, TP2, T3

14. Transport information

IMDG Class	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (2-OCTYL-4-ISOTHIAZOLINONE)	8	II	  	Emergency schedules (EmS) F-A, S-B
IATA-DGR Class	UN2922	CORROSIVE LIQUID, TOXIC, N.O.S. (2-OCTYL-4-ISOTHIAZOLINONE)	8	II	  	Passenger aircraft 851: 1 L Cargo aircraft 855: 30 L

PG* : Packing group

RQ : 0 lbs

15. Regulatory information

HAZCOM Standard Status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Section 311/312 Hazard Categories : Immediate (Acute) Health Hazard

	<u>Ingredient name</u>	<u>CAS number</u>	<u>Concentration (%)</u>
SARA Title III Section 302 Extremely Hazardous Substances	: None		

	<u>Ingredient name</u>	<u>CAS number</u>	<u>Concentration (%)</u>
SARA Title III Section 313 Toxic Chemicals	: None		

	<u>Ingredient name</u>	<u>CAS number</u>	<u>RQ</u>
US EPA CERCLA Hazardous Substances (40 CFR 302)	: None		

State regulations

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections on the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<u>Ingredient name</u>	<u>CAS number</u>	<u>State Code</u>	<u>Concentration (%)</u>
Propylene glycol	57-55-6	NJ - HS, PA - RTK HS	50 - 60
2-Octyl-4-isothiazolinone	26530-20-1		40 - 50

15. Regulatory information

Massachusetts Substances: MA - S
Massachusetts Extraordinary Hazardous Substances: MA - Extra HS
New Jersey Hazardous Substances: NJ - HS
Pennsylvania RTK Hazardous Substances: PA - RTK HS
Pennsylvania Special Hazardous Substances: PA - Special HS

California Prop. 65

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

U.S. Toxic Substances Control Act : This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

16. Other information

Hazardous Material Information System

Health	3
Flammability	2
Physical hazards	0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme
*=Chronic

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

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

Contact person : Product Safety and Regulatory Affairs

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Version : 1

Indicates information that has changed from previously issued version.

Notice to reader

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