

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)


Printing date: 07/20/2016

Revision: 07/20/2016

1 Identification

- **Product identifier**
- **Trade name:** Fogger Flushing Solution
- **Product code:** MP-FOG-FLUSH
- **CAS Number:**
8008-20-6
- **Recommended use and restriction on use**
- **Recommended use:** Surface cleanser
- **Restrictions on use:** Contact manufacturer
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
NonLethal Technologies, Inc.
9419 Rt 286 Hwy W
Homer City, PA 15748
USA
+1 724-479-5100
nlt@nonlethaltechnologies.com
- **Emergency telephone number:** 1-800-255-3924 (Intl.: +1 813-248-0585) (CHEMTEL # MIS9685256)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Flam. Liq. 3 H226 Flammable liquid and vapor.
Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
- **Label elements**
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**

GHS02 GHS07 GHS08
- **Signal word:** Danger
- **Hazard statements:**
H226 Flammable liquid and vapor.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
- **Precautionary statements:**
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing mist/vapors/spray.
P264 Wash thoroughly after handling.
P280 Wear protective gloves / eye protection / face protection.
P233 Keep container tightly closed.

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| <p>P271</p> <p>P303+P361+P353</p> <p>P370+P378</p> <p>P304+P340</p> <p>P312</p> <p>P332+P313</p> <p>P301+P310</p> <p>P331</p> <p>P362+P364</p> <p>P405</p> <p>P403+P235</p> <p>P501</p> | <p>Use only outdoors or in a well-ventilated area.</p> <p>If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>In case of fire: Use foam, powder, or carbon dioxide for extinction.</p> <p>IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>Call a POISON CENTER/doctor if you feel unwell.</p> <p>If skin irritation occurs: Get medical advice/attention.</p> <p>IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>Do NOT induce vomiting.</p> <p>Take off contaminated clothing and wash it before reuse.</p> <p>Store locked up.</p> <p>Store in a well-ventilated place. Keep cool.</p> <p>Dispose of contents/container in accordance with local/regional/national/international regulations.</p> |
|---|---|

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
8008-20-6 Kerosine (petroleum)

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately remove any clothing soiled by the product.
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
A person vomiting while lying on their back should be turned onto their side.
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:**
Breathing difficulty
Dizziness
Coughing
Irritant to skin and mucous membranes.
Slight irritant effect on eyes.

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- **Danger:**
 - Danger of impaired breathing.
 - May be fatal if swallowed and enters airways.
 - May cause drowsiness or dizziness.
- **Indication of any immediate medical attention and special treatment needed:**
 - If swallowed, gastric irrigation with added, activated carbon.
 - If swallowed or in case of vomiting, danger of entering the lungs.
 - If necessary oxygen respiration treatment.
 - Later observation for pneumonia and pulmonary edema.
 - If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
 - Foam
 - Carbon dioxide
 - Gaseous extinguishing agents
 - Fire-extinguishing powder
 - Water fog / haze
- **For safety reasons unsuitable extinguishing agents:** Water
- **Special hazards arising from the substance or mixture**
 - Flammable liquid and vapor.
 - Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
 - Wear self-contained respiratory protective device.
 - Wear fully protective suit.
- **Additional information:**
 - Eliminate all ignition sources if safe to do so.
 - Cool endangered containers with water fog.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
 - Use respiratory protective device against the effects of fumes/dust/aerosol.
 - Wear protective equipment. Keep unprotected persons away.
 - Ensure adequate ventilation.
 - Keep away from ignition sources.
- **Environmental precautions:**
 - Do not allow to enter sewers/ surface or ground water.
 - Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
 - Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders).
 - Send for recovery or disposal in suitable receptacles.
- **Reference to other sections:**
 - See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
 - Prevent formation of aerosols.
 - Avoid splashes or spray in enclosed areas.
 - Use only in well ventilated areas.
- **Information about protection against explosions and fires:**
 - Keep ignition sources away - Do not smoke.
 - Flammable gas-air mixtures may be formed in empty containers/receptacles.
 - Flammable liquid and vapor.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 - Provide ventilation for receptacles.
 - Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:**
 - Store away from foodstuffs.
 - Store away from oxidizing agents.
- **Further information about storage conditions:** Keep containers tightly sealed.
- **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

8008-20-6 Kerosine (petroleum)

REL (USA)	Long-term value: 100 mg/m ³ Kerosine only
TLV (USA)	Long-term value: 200 mg/m ³ as total hydrocarbon vapor; Skin; P
EL (Canada)	Long-term value: 200 mg/m ³ Skin
EV (Canada)	Long-term value: 200(G) mg/m ³ as total hydrocarbon vapour, Skin
LMPE (Mexico)	Long-term value: 200 mg/m ³ A3, PIEL

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 - The usual precautionary measures for handling chemicals should be followed.

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Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.

· **Engineering controls:** No relevant information available.

· **Breathing equipment:**

Use suitable respiratory protective device when aerosol or mist is formed.

NIOSH or EN approved organic vapor respirator equipped with a dust/mist prefilter should be used.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Nitrile rubber, NBR

Neoprene gloves

Butyl rubber, BR

· **Eye protection:**



Safety glasses

Follow OSHA or EU guidelines concerning the use of protective eyewear.

· **Body protection:**

Protective work clothing

Protection may be required for spills.

· **Limitation and supervision of exposure into the environment**

No relevant information available.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

Form: Liquid

Color: Clear to straw color.

· **Odor:** Hydrocarbon.

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** 150 - 290 °C (302 - 554 °F)

· **Flash point:** 24-59 °C (75-138 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** Not determined.

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· Decomposition temperature:	Not determined.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits Lower: Upper:	Not determined. Not determined.
· Oxidizing properties:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	0.80 ± 0.05 g/cm ³ (6.676 ± 0.417 lbs/gal)
· Relative density:	Not determined.
· Vapor density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with Water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity Dynamic: Kinematic at 40 °C (104 °F):	Not determined. <20.5 mm ² /sec (estimate)
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:**
Used empty containers may contain product gases which form explosive mixtures with air.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
Flammable liquid and vapor.
Reacts with oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid:**
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
- **Incompatible materials:** No relevant information available.
- **Hazardous decomposition products:**

Under fire conditions only:
Carbon monoxide and carbon dioxide
Hydrocarbons

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11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** May have mild irritant effect on eyes.
- **Sensitization:** Based on available data, the classification criteria are not met.
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer):
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Substance is not listed.

· NTP (National Toxicology Program):

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration):

Substance is not listed.

- **Probable route(s) of exposure:**

Ingestion.
Inhalation.
Eye contact.
Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):**

May cause drowsiness or dizziness.
Irritating to skin.
May be fatal if swallowed and enters airways.

- **Repeated dose toxicity:** From product as supplied: None.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** May cause drowsiness or dizziness.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** May be fatal if swallowed and enters airways.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** Toxic for aquatic organisms
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Ecotoxic effects:**
- **Remark:** Toxic for fish

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- **Additional ecological information**

- **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

- **Other adverse effects:** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- **Uncleaned packagings**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**

- **DOT, ADR, IMDG, IATA**

UN1223

- **UN proper shipping name**

- **DOT, ADR, IMDG, IATA**

KEROSENE

- **Transport hazard class(es)**

- **DOT**



- **Class**

3 Flammable liquids

- **Label**

3

- **ADR**



- **Class**

3 (F1) Flammable liquids

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· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, ADR, IMDG, IATA	III
· Environmental hazards	Product contains environmentally hazardous substances: Kerosine (petroleum)
· Marine pollutant:	Yes
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	F-E,S-E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 302 (extremely hazardous substances):**

Substance is not listed.

· **Section 304 (emergency release notification):**

Substance is not listed.

· **Section 355 (extremely hazardous substances):**

Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

· **TSCA (Toxic Substances Control Act)**

Substance is listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

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Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

Carcinogenic categories
EPA (Environmental Protection Agency):

Substance is not listed.

IARC (International Agency for Research on Cancer):

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health):

Substance is not listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation / last revision 07/20/2016 / -
Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

LDLo: Lowest Lethal Dose Observed

Flam. Liq. 3: Flammable liquids – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

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Website: www.chemtelinc.com

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