

**FoundryGeneral® Steam Cleaner 3367 --**

**Section 1. Supplier Information**



**FoundryGeneral® c/o General Chemical Corp.**

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**Section 2. Hazardous Ingredients**

<u>Hazardous Component(s)</u>	<u>CAS #</u>	<u>PEL TWA</u>	<u>PEL Ceiling</u>	<u>TLV TWA</u>	<u>TLV STEL</u>	<u>MFG Limits</u>	<u>WGT %</u>
Triethanolamine	102-71-6	N/E	N/E	5 mg/m3	N/E	N/E	< 5
Sodium cumenesulfonate	28348-53-0	N/E	N/E	N/E	N/E	N/E	< 5
Tetrapotassium pyrophosphate	7320-34-5	5 mg/m3	15 mg/m	N/E	10 mg/m	N/E	1 - 10
Alcohol ethoxylate, secondary	Proprietary	N/E	N/E	N/E	N/E	N/E	5 - 15
Glycol ether DPM	34590-94-8	100 ppm	N/E	100 ppm	150 ppm	N/E	5 - 15

N/A = Not Applicable; N/E = Not Established; \* = Mists; # = Skin; ' = Respirable Dust; " = Total Dust; ^ = Vapor; \*\* = Fumes; C = Ceiling Limit

All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory and the Canadian Domestic Substances List (DSL), or are exempt from the listing.

**Section 3. Hazards Identification**

**Primary Routes of Entry**

Inhalation: YES  
Skin: YES  
Ingestion: NO

**Hazardous Materials Information System (HMIS) Ratings**

Health: \* 1  
Fire: 0  
Reactivity: 0

0 = Minimal  
1 = Slight  
2 = Moderate  
3 = Serious  
4 = Severe  
\* = Chronic Hazard

**Signs of Symptoms of Exposure:**

**INHALATION:** No effects of exposure expected. At very high concentrations only, this product may cause headache, nose and throat irritation, nausea and/or mental confusion.

**SKIN:** Prolonged or repeated contact can cause irritation.

**EYES:** Vapors are slightly uncomfortable. Splashes can be irritating, will cause painful burning or stinging of eyes and lids, watering of eyes and inflammation of conjunctiva.

**INGESTION:** Ingestion of this product may result in vomiting. Aspiration (breathing) of vomitus

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into the lungs must be avoided, as even small quantities may result in aspiration pneumonitis.

**Chemical Listed as Potential Carcinogens:**

NTP: NO

IARC: NO

OSHA: NO

Target Organs: Eyes, skin, and respiratory system.

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**Section 4. Emergency And First Aid Procedures**

**INHALATION:** If adverse effects such as dizziness, nausea, or irritation are noted, move person to fresh air. If not breathing, give artificial respiration. Get medical attention!

**SKIN:** Immediately wash skin with large amounts of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

**EYES:** Flush eyes immediately with water for at least 15 minutes. If irritation persists, call a physician.

**INGESTION:** If swallowed, dilute with water. Never give fluids if the victim is unconscious or having convulsions. Contact a physician immediately!

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**Section 5. Fire Fighting Measures**

Flash Point: None to boiling. Method Used: Tagliabue Closed Cup

Flammable Limits in Air % by Volume: LEL: N/E UEL: N/E

Extinguisher Media: Water, carbon dioxide, dry chemical, or foam.

Special Fire Fighting Procedures: Wear a self-contained breathing apparatus when fighting fire in an enclosed area.

Unusual Fire And Explosion Hazards: Low fire hazard when exposed to heat and flame. Product is not flammable or combustible.

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**Section 6. Accidental Release Measures**

If material is spilled, absorb with sand, earth, or similar inert material. Place in closed, labeled containers for proper disposal.

CERCLA (Superfund) Reportable Quantity (in lbs) None.

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**Section 7. Handling and Storage**

**Handling:** Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.

**Storage:** KEEP FROM FREEZING! Store in a dry location at room temperature. Keep container closed and maintain all original markings and labels.

**Other:** Do not reuse container without recycling or reconditioning. Handle empty containers as if they were full.

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**Section 8. Exposure Controls and Personal Protection**

**Respiratory Protection:** Not required under normal conditions of use.

**Local Exhaust:** None normally required. Local exhaust may be needed under special circumstances such as poorly ventilated areas, evaporation from large surfaces, spraying, heating, etc.

**Mechanical Exhaust:** Mechanical ventilation should be sufficient to maintain exposure levels below exposure limits.

**Protective Gloves:** Wear chemical resistant gloves.

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Eye Protection: At a minimum, wear safety glasses with side shields.

Other Protection: Eye wash and safety shower should be readily available. Wear a chemical resistant apron and boots where splashing is possible.

Hygienic Practices: Protective equipment and clothing should be selected, used and maintained according to applicable standards and regulations. For further information, contact the clothing or equipment manufacturer. Do not eat, drink, or smoke while using this product. Wash hands prior to eating, drinking, smoking, or using restrooms. Cleanse skin thoroughly after contact, before breaks and meals, and at the end of the work shift.

**Section 9. Physical and Chemical Properties**

Boiling Point:	212 ° F (initial)	Degree of water solubility:
Specific Gravity (H <sub>2</sub> O=1):	1.05-1.06	Negligible = Less than 0.1%
Vapor Pressure (mm Hg):	Similar to water.	Slight = 0.1% - 1%
Vapor Density (air=1)	Similar to water.	Moderate = 1% - 10%
Solubility in Water:	Complete.	Appreciable = More than 10%
Reactivity in Water:	None.	Complete = 100%
Weight per Gallon (lb/gal):	8.7 - 8.8 lbs/gal	
% Volatile by Volume:	81-83%	
% Solid by Weight:	17-19%	
Appearance and Odor:	Clear, yellow liquid with a mild odor.	
Theoretical VOC: (>0.1 mm Hg @ 20 ° C)	0 lbs/gal	
Analytical VOC : (EPA method 24)	0.7 - 0.8 lbs/gal	
pH:	8.5 - 9.5	

**Section 10. Stability and Reactivity**

Stability: Stable. Hazard Polymerization: Will not occur.

Conditions to Avoid: Extreme heat and flames.

Incompatibility (Materials to Avoid): Oxidizing agents, acids, bases, and materials that react with hydroxyl compounds.

Hazardous Decomposition Products: Oxides of carbon.

**Section 11. Toxicological Information**

Triethanolamine (TEA) [CASRN 000102-71-6]

**ACUTE TOXICITY**

Oral, LD50 (Rat; female) = 4.92 ml/kg      Dermal, LD50 (Rabbit) > 16 ml/kg; 24 h occluded.  
Oral, LD50 (Rat; male) = 8.57 ml/kg

**SIGNIFICANT DATA WITH POSSIBLE RELEVANCE TO HUMANS**

Recent analyses of Triethanolamine for N-nitrosodiethanolamine have not revealed its presence at the detection limit of the test (20ppb). However, amines may react with nitrites or other nitrosating agents to form nitrosamines. Some nitrosamines have been shown to be carcinogenic in laboratory animals. [20, 2-19,4,0,5,6-062300]

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Sodium cumenesulfonate [CASRN 028348-53-0]

ACUTE TOXICITY Oral LD50 (rat) = 5.2 g/kg  
Dermal LD50 (rat) > 2.0 g/kg [17,13-13,E,F,18,2-110597]

Tetrapotassium pyrophosphate [CASRN 007320-34-5]

ACUTE TOXICITY Oral LD50 (rat) = 2,980 mg/kg Eye irritation (rabbit): 11.1/110.0; moderately irritating

Dermal LD50 (rabbit) > 7,940 mg/kg Skin Irritation (rabbit): 0.5/8.0 (24-hr. exposure); practically non-irritating

Sub-chronic: Following repeated exposure (13-weeks) to this product in their food, kidney damage with changes in body weight, food consumption, clinical parameters and organ weights were reported at high-dose levels in rats.

The dry material may cause foreign body irritation in some individuals. Prolonged contact with the dry material may cause drying or chapping of the skin. Excessive inhalation of dust may be annoying and can mechanically impede respiration. [0,8-19,15-062300]

Alcohol ethoxylate, secondary

ACUTE TOXICITY Oral LD50 (rat) = 3.25 ml/kg  
Dermal LD50 (rabbit) = 3.18 ml/kg; 24 h occluded

SIGNIFICANT DATA WITH POSSIBLE RELEVANCE TO HUMANS In studies with rabbits sustained occluded contact of undiluted surfactant can cause inflammatory changes in the lung. [20,2-19,P,18,H,18-091600]

Dipropylene glycol methyl ether [CASRN 034590-94-8]

ACUTE TOXICITY Oral LD50 (rat) = 5.35 g/kg Eye irritation: Mildly irritating [rabbit, 24 hour(s)]  
Dermal LD50 (rabbit) = 9.5 g/kg Dermal irritation: Draize - Not irritating [Human]  
Inhalation LC50 (rat) > 400 ppm, 7 hour(s)

MUTAGENICITY: In vitro mutagenicity studies were negative. [3-3,3,15,12-041200], [18,7-12,3-070700]

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**Section 12. Ecological Information**

Triethanolamine (TEA) [CASRN 000102-71-6]

AQUATIC TOXICITY Expected to have low toxicity to aquatic species.

MOBILITY Not expected to selectively partition and absorb to soil or sediments.

BIODEGRADABILITY Readily biodegradable and are not expected to persist in the environment.

POTENTIAL TO BIOACCUMULATE Not expected to bioaccumulate. [7,20-19,J,J,11,5,6,I,F-092299]

Sodium cumenesulfonate [CASRN 028348-53-0]

ECOTOXICITY

96 hr LC50 (fathead minnow) > 1000 mg/L 24 & 48 hr EC50 (daphnia magna) >1000 mg/L

96 hr NOEC (fathead minnow) = 560 mg/L 24 & 48 hr NOEC (daphnia magna) >1000 mg/L

DEGRADATION Aerobic degradation: Modified Sturm test, classified "biodegradable".

The above data is for a 45% aqueous solution of sodium cumenesulfonate [17,13-13,E,F,18,2-110597]

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Tetrapotassium pyrophosphate [CASRN 007320-34-5]

ECOTOXICITY 96 hr - LC50 (rainbow trout) > 100mg/l, practically non-toxic 48 hr - EC50 (daphnia magna) > 100 mg/l, practically non-toxic  
96 hr - LC50 (mysid shrimp) > 100mg/l, practically non-toxic

This product is considered to have low toxicity to aquatic and estuarine species. Inorganic phosphates, including this product, at high concentrations in the environment have the potential to cause eutrophication in aquatic systems. This condition is characterized by excessive algal growth, and subsequent decreases in oxygen levels. In general, proper use and disposal of this product should pose no adverse ecological risk. [0,8-19,15-062300]

Alcohol ethoxylate, secondary

ECOTOXICITY 96 hr LC50 (fathead minnow) = 4.4 - 5.5 mg/L IC50 (bacteria) > 5,000 mg/L  
48 hr LC50 (daphnia magna) = 2.6 - 3.7 mg/L

FATE Theo. Oxy. Demand (ThOD) = 2.36 mg/mg BOD-Day 5 = 21-37% BOD-Day 10 = 40-51% BOD-Day 20 = 66-71% [20,2-19,P,18,H,18-091600]

Dipropylene glycol methyl ether [CASRN 034590-94-8]

ECOTOXICITY 96 HR - LC50 (fathead minnow) = 10,000 mg/l 48 HR - EC50 (daphnia) = 5,000 mg/l

Environmental Fate: This material is volatile and water soluble. It may enter soil and may contaminate water. This material is likely to evaporate from dry soil but not from water. It is not expected to adsorb onto soils or sediments. Theo. BOD (Closed Bottle Test) 77 - 84% (28 day).

Bioaccumulation: No relevant studies identified.

Biodegradation: This material is expected to be readily biodegradable in acclimated systems. [11,24-0,3,15,12-070600]

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**Section 13. Disposal Considerations**

Waste Disposal Methods (Federal, State, Local):

In accordance with all federal, state and local requirements.

RCRA Hazardous Waste Number: N/A

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**Section 14. Transport Information**

Hazardous Material Description:

(Proper shipping name, hazard class, hazard ID#, packing group)

Domestic ground non-bulk: NOT REGULATED

Domestic ground bulk: NOT REGULATED

International: NOT REGULATED

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**Section 15. Regulatory Information**

SARA 313 Information

This product contains the following chemical(s) above deminis concentrations and may be subject to reporting under section 313:

None.

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**Section 16. Other Information**

This MSDS contains revisions in the following sections: New product

Prepared by: General Chemical

Revised by:

The development of this Material Safety Data Sheet (MSDS) relies upon information provided to us by each of our raw material suppliers. This MSDS will be updated as changes occur to their MSDS(s).

We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, direct or indirect, as a result of their use.