SAFETY DATA SHEET

Easy-Off® Fume Free Oven Cleaner Aerosol - Lemon scent

1. Product and company identification

Product name: Easy-Off® Fume Free Oven Cleaner Aerosol - Lemon scent

Distributed by: Reckitt Benckiser LLC.
Morris Corporate Center IV
399 Interpace Parkway (P.O. Box 225)
Parsippany, New Jersey 07054-0225
+1 973 404 2600

Emergency telephone number (Medical): 1-800-338-6167
Emergency telephone number (Transport): 1-800-424-9300 (U.S. & Canada) CHEMTREC
Outside U.S. and Canada (North America), call Chemtrec: 703-527-3887

Website: http://www.rbnainfo.com

Product use: Oven Cleaner
Consumer use

This SDS is designed for workplace employees, emergency personnel and for other conditions and situations where there is greater potential for large-scale or prolonged exposure, in accordance with the requirements of USDOL Occupational Safety and Health Administration.

This SDS is not applicable for consumer use of our products. For consumer use, all precautionary and first aid language is provided on the product label in accordance with the applicable government regulations, and shown in Section 15 of this SDS.

SDS #: D0059366 v6.0
Formulation #: 363915 v6.0
UPC Code / Sizes: 14.5 oz., 16 oz.; 24 oz. Aerosol Cans

2. Hazards identification

Classification of the substance or mixture:
- FLAMMABLE AEROSOLS - Category 2
- SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
- SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms:

Signal word: Warning

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2. Hazards identification

Hazard statements:
- Flammable aerosol.
- Pressurized container: may burst if heated.
- Causes serious eye irritation.
- May cause an allergic skin reaction.

Precautionary statements:

General:
- Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention:
- Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response:
- IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention/advice.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice.

Storage:
- Protect from sunlight and do not expose to temperatures exceeding 50 ºC/122 ºF.

Disposal:
- Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements:
- None known.

Hazards not otherwise classified:
- None known.

3. Composition/information on ingredients

Substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>5 - 10</td>
<td>112-34-5</td>
</tr>
<tr>
<td>potassium carbonate</td>
<td>2.5 - 5</td>
<td>584-08-7</td>
</tr>
<tr>
<td>2-aminoethanol</td>
<td>2.5 - 5</td>
<td>141-43-5</td>
</tr>
<tr>
<td>isobutane</td>
<td>2.5 - 5</td>
<td>75-28-5</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>0.1 - 1</td>
<td>5989-27-5</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

4. First aid measures

Description of necessary first aid measures:

Eye contact:
- Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
4. First aid measures

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

**Skin contact**

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

**Eye contact**: Causes serious eye irritation.

**Inhalation**: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact**: May cause an allergic skin reaction.

**Ingestion**: Irritating to mouth, throat and stomach.

**Over-exposure signs/symptoms**

**Eye contact**: Adverse symptoms may include the following:
- pain or irritation
- watering
- redness

**Inhalation**: Adverse symptoms may include the following:
- respiratory tract irritation
- coughing

**Skin contact**: Adverse symptoms may include the following:
- irritation
- redness

**Ingestion**: No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

**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.

**Specific treatments**: No specific treatment.
4. First aid measures

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media**: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**: None known.

**Specific hazards arising from the chemical**: Flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flashback, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

**Hazardous thermal decomposition products**: Decomposition products may include the following materials:
- Carbon dioxide
- Carbon monoxide
- Nitrogen oxides
- Metal oxide/oxides

**Special protective actions for fire-fighters**: 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**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, protective equipment and emergency procedures**

**For non-emergency personnel**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6. Accidental release measures

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Large spill:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Small spill:

Methods and materials for containment and cleaning up

7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing gas. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 only non-sparking tools. Empty containers retain product residue and can be hazardous.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away 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. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Control

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>ACGIH TLV (United States, 6/2013). TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor</td>
</tr>
<tr>
<td>2-aminoethanol</td>
<td>ACGIH TLV (United States, 6/2013). TWA: 3 ppm 8 hours. TWA: 7.5 mg/m³ 8 hours. STEL: 6 ppm 15 minutes. STEL: 15 mg/m³ 15 minutes. OSHA PEL 1989 (United States, 3/1989). TWA: 3 ppm 8 hours. TWA: 8 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

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### 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>isobutane</th>
</tr>
</thead>
</table>
| STEL: 6 ppm 15 minutes.  
STEL: 15 mg/m³ 15 minutes.  
**NIOSH REL (United States, 10/2013).**  
TWA: 3 ppm 10 hours.  
TWA: 8 mg/m³ 10 hours.  
STEL: 6 ppm 15 minutes.  
STEL: 15 mg/m³ 15 minutes.  
**OSHA PEL (United States, 2/2013).**  
TWA: 3 ppm 8 hours.  
TWA: 6 mg/m³ 8 hours.  
**NIOSH REL (United States, 10/2013).**  
TWA: 800 ppm 10 hours.  
TWA: 1900 mg/m³ 10 hours.  
**ACGIH TLV (United States, 6/2013).**  
STEL: 1000 ppm 15 minutes. |

**Appropriate engineering controls**: Use only with adequate ventilation. 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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
8. Exposure controls/personal protection

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

9. Physical and chemical properties

Appearance

Physical state: Liquid. [Liquefied compressed gas.]

Color: White.

Odor: Lemon-like.

Odor threshold: Not available.

pH: 12.5 [Conc. (% w/w): 100%][25°C]

Melting point: Not available.

Boiling point: Not available.

Flash point: Open cup: >93.3°C (>199.9°F) [Concentration]

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: Not available.

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: 0.994 to 1.07

Solubility: Easily soluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not available.

Aerosol product

Type of aerosol: Foam

Heat of combustion: 4.594 kJ/g

10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame).

Incompatible materials: No specific data.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2700 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4500 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1870 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>potassium carbonate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1720 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>2-aminoethanol</td>
<td>LD50 Oral</td>
<td>Rabbit</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4400 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>*Easy-Off® FF Oven Cleaner Aerosol - Lemon scent</td>
<td>LC50 Inhalation Vapor</td>
<td>Rat</td>
<td>&gt;200 mg/l</td>
<td>24 hours</td>
</tr>
<tr>
<td>*Easy-Off® FF Oven Cleaner Aerosol - Lemon scent</td>
<td>LD50 Oral</td>
<td>Rabbit</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Not classified Harmful. *Information is based on toxicity test result of the concentrate of a similar product.

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 20 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>20 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>250 Micrograms</td>
<td>-</td>
</tr>
<tr>
<td>2-aminoethanol</td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>505 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>2-aminoethanol</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 10 Percent</td>
<td>-</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>Skin - Edema of the conjunctivae</td>
<td>Rabbit</td>
<td>&gt;2</td>
<td>-</td>
<td>14 days</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>Skin - Erythema/Eschar</td>
<td>Rabbit</td>
<td>0.59</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary

Skin: Non-irritant to skin.
*Information is based on toxicity test result of the concentrate of a similar product.

Eyes: Irritating to eyes.
*Information is based on toxicity test result of the concentrate of a similar product.

Sensitization
Not available.

Mutagenicity
Not available.

Carcinogenicity
Not available.

Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>d-Limonene</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

Reproductive toxicity

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11. Toxicological information

Not available.

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>d-Limonene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>

**Information on the likely routes of exposure**

**Potential acute health effects**

**Eye contact**: Causes serious eye irritation.

**Inhalation**: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact**: May cause an allergic skin reaction.

**Ingestion**: Irritating to mouth, throat and stomach.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact**: Adverse symptoms may include the following:
- pain or irritation
- watering
- redness

**Inhalation**: Adverse symptoms may include the following:
- respiratory tract irritation
- coughing

**Skin contact**: Adverse symptoms may include the following:
- irritation
- redness

**Ingestion**: No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects**: Not available.

**Potential delayed effects**: Not available.

**Long term exposure**

**Potential immediate effects**: Not available.

**Potential delayed effects**: Not available.

**Potential chronic health effects**
11. Toxicological information

Not available.

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal</td>
<td>37894.7 mg/kg</td>
</tr>
</tbody>
</table>

12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>Acute LC50 1300000 µg/l Fresh water</td>
<td>Fish - Lepomis macrochirus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 630000 µg/l Fresh water</td>
<td>Crustaceans - Ceriodaphnia dubia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 650000 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td>potassium carbonate</td>
<td>Acute EC50 8.42 mg/l Fresh water</td>
<td>Algae - Desmodesmus</td>
<td>72 hours</td>
</tr>
<tr>
<td>2-aminoethanol</td>
<td>Acute LC50 &gt;100000 µg/l Marine water</td>
<td>Crustaceans - Crangon crangon - Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>Acute LC50 170000 µg/l Fresh water</td>
<td>Fish - Carassius auratus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 421 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 688 µg/l Fresh water</td>
<td>Fish - Pimephales promelas - Juvenile</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Fledgling, Hatchling, Weanling)</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability

Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>1</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>2-aminoethanol</td>
<td>-1.31</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>4.38</td>
<td>1022</td>
<td>high</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>): Not available.

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Other adverse effects: No known significant effects or critical hazards. Release of large quantities into water may cause a pH-change resulting in danger for aquatic life.

13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>UN1950</td>
<td>Aerosols, flammable</td>
<td>2.1</td>
<td>-</td>
<td></td>
<td>Limited quantity</td>
</tr>
<tr>
<td>TDG Classification</td>
<td>UN1950</td>
<td>Aerosols, flammable</td>
<td>2.1</td>
<td>-</td>
<td></td>
<td>Limited quantity</td>
</tr>
<tr>
<td>Mexico Classification</td>
<td>UN1950</td>
<td>Aerosols, flammable</td>
<td>2.1</td>
<td>-</td>
<td></td>
<td>Limited quantity</td>
</tr>
<tr>
<td>IMDG Class</td>
<td>UN1950</td>
<td>Aerosols, flammable</td>
<td>2.1</td>
<td>-</td>
<td></td>
<td>Limited quantity</td>
</tr>
<tr>
<td>IATA-DGR Class</td>
<td>UN1950</td>
<td>Aerosols, flammable</td>
<td>2.1</td>
<td>-</td>
<td></td>
<td>See DG-List.</td>
</tr>
</tbody>
</table>

PG*: Packing group
15. Regulatory information

U.S. Federal regulations:
- TSCA 8(a) PAIR: 1,1'-oxydiropan-2-ol; pentane
- TSCA 8(a) CDR Exempt/Partial exemption: Not determined
- United States inventory (TSCA 8b): Not determined.
- Clean Air Act (CAA) 112 regulated flammable substances: isobutane

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs):
- Listed

Clean Air Act Section 602 Class I Substances:
- Not listed

Clean Air Act Section 602 Class II Substances:
- Not listed

DEA List I Chemicals (Precursor Chemicals):
- Not listed

DEA List II Chemicals (Essential Chemicals):
- Not listed

SARA 302/304
Composition/information on ingredients:
No products were found.

SARA 304 RQ:
- Not applicable.

SARA 311/312
Classification:
- Fire hazard
- Immediate (acute) health hazard

Composition/information on ingredients:

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>5 - 10</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>potassium carbonate</td>
<td>2.5 - 5</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>2-aminoethanol</td>
<td>2.5 - 5</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>0.1 - 1</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

SARA 313

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form R - Reporting requirements</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>112-34-5</td>
</tr>
<tr>
<td>Supplier notification</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>112-34-5</td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations:
- Massachusetts: The following components are listed: ETHANOLAMINE; ISOBUTANE
- New York: None of the components are listed.
- New Jersey: The following components are listed: ETHANOLAMINE; ETHANOL, 2-AMINO-; GLYCOL ETHERS; Isobutane; PROPANE, 2-METHYL-

Code #: FF363915  USD GHS
SDS #: D0059366 v6.0  Date of issue: 20/04/2015
15. Regulatory information

Pennsylvania : The following components are listed: ETHANOL, 2-AMINO-; GLYCOL ETHERS; PROPANE, 2-METHYL-

Label elements

Signal word : CAUTION
Hazard statements : Eye Irritant
Contains Monoethanolamine and Diethylene Glycol n-Butyl Ether.
CONTENTS UNDER PRESSURE.
Precautionary measures : Keep out of the reach of children. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 120 °F. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Do not get in eyes. Wash thoroughly after handling.

16. Other information

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>D</td>
</tr>
</tbody>
</table>

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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

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

Flammability
Health
Instability/Reactivity
Special

NFPA (30B) aerosol Flammability Level 1

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.
Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Revision comments

Revision on section 2 (Inclusion of "Pressurized container: may burst if heated.").

Indicates information that has changed from previously issued version.

RB is a member of the CSPA Product Care Product Stewardship Program.