# SAFETY DATA SHEET



# BG 403 Non-Chlorinated Brake Cleaner, 45% VOC (Bulk)

#### Product and company identification 1.

**Manufacturer** : BG Products Inc.

> 701 S. Wichita Street Wichita, KS, 67213, USA www.bgprod.com

Relevant identified uses of the substance or mixture and uses advised against

: 403CCB MSDS# Validation date : 12/21/2012.

Responsible name : Kolin Anglin, Environmental Coordinator

> 316-265-2686 msds@bgprod.com

: (800) 424-9300 (CHEMTREC) In case of emergency

#### Hazards identification 2.

**OSHA/HCS** status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

FLAMMABLE LIQUIDS - Category 2 Classification of the substance or mixture

SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

CARCINOGENICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] -

Category 3

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 25%

**GHS label elements** 

**Hazard pictograms** 







Signal word : Danger

: Highly flammable liquid and vapor. **Hazard statements** 

Causes serious eve irritation.

Causes skin irritation.

Suspected of causing cancer.

May cause drowsiness and dizziness.

**Precautionary statements** 

**Prevention** 

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.

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### 2. Hazards identification

Response

: IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. 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.

Storage

: Store locked up. Store in a well-ventilated place. Keep cool.

**Disposal** 

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

Hazards not otherwise classified

: None known.

# 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification

: Not available.

**CAS** number/other identifiers

**CAS number** : Not applicable.

Product code : 403CCB

| Ingredient name | %       | CAS number |
|-----------------|---------|------------|
| acetone         | 40 - 70 | 67-64-1    |
| xylene          | 10 - 30 | 1330-20-7  |
| methanol        | 1 - 5   | 67-56-1    |
| ethylbenzene    | 1 - 5   | 100-41-4   |

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

There are no 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. Occupational exposure limits, if available, are listed in Section 8.

# 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.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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.

**Skin contact** 

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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## 4. First aid measures

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 necessary, call a poison center or physician. 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 : Can cause central nervous system (CNS) depression. May cause drowsiness and

dizziness.

**Skin contact**: Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression. 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:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**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 : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

**Protection of first-aiders**: No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to

give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

# 5. Fire-fighting measures

#### **Extinguishing media**

**Suitable extinguishing**: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

media

Unsuitable extinguishing : Do not use water jet.

media

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#### 5. Fire-fighting measures

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

**Hazardous thermal** decomposition products Decomposition products may include the following materials: carbon dioxide carbon monoxide

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. 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 nonemergency 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).

#### 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.

#### 7. Handling and storage

#### Precautions for safe handling

**Protective measures** 

Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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

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# 7. Handling and storage

# Advice on general occupational hygiene

only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

: 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

# Conditions for safe storage, : including any incompatibilities

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. Store locked up. 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.

# 8. Exposure controls/personal protection

#### **Control parameters**

**Occupational exposure limits** 

| Ingredient name                                                                                                                                                                                                                                                                                                                                                                                |                                     | Exposure limits                                                                                                                                                                                                                                                                                                                                                                       |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Acetone  ACGIH TLV (United States, 3/20 TWA: 500 ppm 8 hours. TWA: 1188 mg/m³ 8 hours. STEL: 750 ppm 15 minutes. STEL: 1782 mg/m³ 15 minutes. OSHA PEL 1989 (United States, TWA: 750 ppm 8 hours. TWA: 1800 mg/m³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 2400 mg/m³ 15 minutes. STEL: 2400 mg/m³ 15 minutes. NIOSH REL (United States, 6/20 TWA: 250 ppm 10 hours. TWA: 590 mg/m³ 10 hours. |                                     | TWA: 1188 mg/m³ 8 hours.  STEL: 750 ppm 15 minutes.  STEL: 1782 mg/m³ 15 minutes.  OSHA PEL 1989 (United States, 3/1989).  TWA: 750 ppm 8 hours.  TWA: 1800 mg/m³ 8 hours.  STEL: 1000 ppm 15 minutes.  STEL: 2400 mg/m³ 15 minutes.  NIOSH REL (United States, 6/2009).  TWA: 250 ppm 10 hours.  TWA: 590 mg/m³ 10 hours.  OSHA PEL (United States, 6/2010).  TWA: 1000 ppm 8 hours. |  |
| xylene                                                                                                                                                                                                                                                                                                                                                                                         |                                     |                                                                                                                                                                                                                                                                                                                                                                                       |  |
| methanol                                                                                                                                                                                                                                                                                                                                                                                       |                                     | TWA: 100 ppm 6 hours.  TWA: 435 mg/m³ 8 hours.  ACGIH TLV (United States, 3/2012).  Absorbed through skin.  TWA: 200 ppm 8 hours.  TWA: 262 mg/m³ 8 hours.  STEL: 250 ppm 15 minutes.  STEL: 328 mg/m³ 15 minutes.                                                                                                                                                                    |  |
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# 8. Exposure controls/personal protection

OSHA PEL 1989 (United States, 3/1989).

Absorbed through skin.

TWA: 200 ppm 8 hours. TWA: 260 mg/m³ 8 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m³ 15 minutes.

NIOSH REL (United States, 6/2009).

Absorbed through skin.

TWA: 200 ppm 10 hours. TWA: 260 mg/m³ 10 hours. STEL: 250 ppm 15 minutes. STEL: 325 mg/m³ 15 minutes. OSHA PEL (United States, 6/2010).

TWA: 200 ppm 8 hours. TWA: 260 mg/m<sup>3</sup> 8 hours.

ACGIH TLV (United States, 3/2012).

TWA: 20 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes.

NIOSH REL (United States, 6/2009).

TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes. OSHA PEL (United States, 6/2010).

TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.

Appropriate engineering controls

ethylbenzene

: 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. 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. 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** 

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#### 8. **Exposure controls/personal 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 antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

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

**Physical state** : Liquid.

Flash point Open cup: -9°C (15.8°F) [Cleveland.]

**Auto-ignition temperature** Not available. Flammable limits Not available.

Color Clear. Odor Solvents pΗ Not available. **Boiling/condensation point** : 70.87°C (159.6°F) Melting/freezing point : -95.53°C (-140°F)

**Specific gravity** 0.784

: 16.3 kPa (122.11 mm Hg) [room temperature] Vapor pressure

Vapor density : >1 [Air = 1] **Odor threshold** : Not available.

**Evaporation rate** : >1 (butyl acetate = 1)

**Dispersibility properties** : Not dispersible in the following materials: cold water, hot water, methanol, diethyl ether.

n-octanol and acetone.

**Solubility** : Soluble in the following materials: methanol and diethyl ether.

Partially soluble in the following materials: n-octanol and acetone.

Insoluble in the following materials: cold water and hot water.

**Pour point** : -40°C (-40°F) **Density** : 6.545 (lbs/gal) **VOC** content <45 % (w/w)

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#### Stability and reactivity **10**.

Reactivity

**Chemical stability** 

Possibility of hazardous

reactions

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

The product is stable.

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

**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. Do not allow vapor to accumulate in low or confined areas.

Incompatible materials

: 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.

# Section 11. Toxicological information

## Information on toxicological effects

#### **Acute toxicity**

| Product/ingredient name | Result               | Species | Dose        | Exposure |
|-------------------------|----------------------|---------|-------------|----------|
| Acetone                 | LD50 Oral            | Rat     | 5800 mg/kg  | -        |
| xylene                  | LC50 Inhalation Gas. | Rat     | 5000 ppm    | 4 hours  |
|                         | LD50 Oral            | Rat     | 4300 mg/kg  | -        |
| methanol                | LC50 Inhalation Gas. | Rat     | 145000 ppm  | 1 hours  |
|                         | LC50 Inhalation Gas. | Rat     | 64000 ppm   | 4 hours  |
|                         | LD50 Dermal          | Rabbit  | 15800 mg/kg | -        |
|                         | LD50 Oral            | Rat     | 5600 mg/kg  | -        |
| ethylbenzene            | LD50 Dermal          | Rabbit  | >5000 mg/kg | -        |
| -                       | LD50 Oral            | Rat     | 3500 mg/kg  | -        |

#### **Irritation/Corrosion**

| Product/ingredient name | Result                   | Species | Score | Exposure       | Observation |
|-------------------------|--------------------------|---------|-------|----------------|-------------|
| Acetone                 | Eyes - Mild irritant     | Human   | -     | 186300 parts   | -           |
|                         |                          |         |       | per million    |             |
|                         | Eyes - Mild irritant     | Rabbit  | -     | 10 microliters | -           |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 20    | -           |
|                         |                          |         |       | milligrams     |             |
|                         | Eyes - Severe irritant   | Rabbit  | -     | 20 milligrams  | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 24 hours 500   | -           |
|                         |                          |         |       | milligrams     |             |
|                         | Skin - Mild irritant     | Rabbit  | -     | 395            | -           |
|                         |                          |         |       | milligrams     |             |
| xylene                  | Eyes - Mild irritant     | Rabbit  | -     | 87 milligrams  | -           |
|                         | Eyes - Severe irritant   | Rabbit  | -     | 24 hours 5     | -           |
|                         |                          |         |       | milligrams     |             |
|                         | Skin - Mild irritant     | Rat     | -     | 8 hours 60     | -           |
|                         |                          |         |       | microliters    |             |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500   | -           |
|                         |                          |         |       | milligrams     |             |
|                         | Skin - Moderate irritant | Rabbit  | -     | 100 Percent    | -           |
| methanol                | Eyes - Moderate irritant | Rabbit  | -     | 24 hours 100   | -           |
|                         |                          |         |       | milligrams     |             |
|                         | Eyes - Moderate irritant | Rabbit  | -     | 40 milligrams  | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 20    | -           |
|                         |                          |         |       | milligrams     |             |
| ethylbenzene            | Eyes - Severe irritant   | Rabbit  | -     | 500            | -           |
|                         |                          |         |       | milligrams     |             |
|                         | Skin - Mild irritant     | Rabbit  | -     | 24 hours 15    | -           |

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milligrams

#### **Sensitization**

Not available.

#### **Mutagenicity**

Not available.

#### Carcinogenicity

Not available.

#### **Classification**

| Product/ingredient name | OSHA | IARC    | NTP |
|-------------------------|------|---------|-----|
| xylene<br>ethylbenzene  | -    | 3<br>2B | -   |

#### Reproductive toxicity

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

| Name    | Category   | Route of exposure | Target organs    |
|---------|------------|-------------------|------------------|
| Acetone | Category 3 | Not applicable.   | Narcotic effects |

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

#### Information on the likely

routes of exposure

: Not available.

#### Potential acute health effects

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

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness and

dizziness.

Skin contact : Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression. 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:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact**: Adverse symptoms may include the following:

irritation redness

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Ingestion : No specific data.

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

**Short term exposure** 

**Potential immediate** 

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

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** 

| Route                | ATE value                  |
|----------------------|----------------------------|
|                      | 19196.4 mg/kg<br>30000 ppm |
| initialation (gases) | σοσοσ ρριτι                |

# 12. Ecological information

#### **Toxicity**

| Product/ingredient name | Result                               | Species                                                                      | Exposure |
|-------------------------|--------------------------------------|------------------------------------------------------------------------------|----------|
| Acetone                 | Acute EC50 20.565 mg/l Marine water  | Algae - Ulva pertusa                                                         | 96 hours |
|                         | Acute LC50 6000000 µg/l Fresh water  | Crustaceans - Gammarus pulex                                                 | 48 hours |
|                         | Acute LC50 10000 µg/l Fresh water    | Daphnia - Daphnia magna                                                      | 48 hours |
|                         | Acute LC50 100000 µg/l Fresh water   | Fish - Pimephales promelas -                                                 | 96 hours |
|                         |                                      | Juvenile (Fledgling, Hatchling,                                              |          |
|                         |                                      | Weanling)                                                                    |          |
|                         | Chronic NOEC 4.95 mg/l Marine water  | Algae - Ulva pertusa                                                         | 96 hours |
|                         | Chronic NOEC 0.1 ml/L Fresh water    | Daphnia - Daphnia magna - Neonate                                            | 21 days  |
| xylene                  | Acute LC50 8500 μg/l Marine water    | Crustaceans - Palaemonetes pugio                                             | 48 hours |
|                         | Acute LC50 13400 µg/l Fresh water    | Fish - Pimephales promelas                                                   | 96 hours |
| methanol                | Acute EC50 16.912 mg/l Marine water  | Algae - Ulva pertusa                                                         | 96 hours |
|                         | Acute LC50 2500000 µg/l Marine water | Crustaceans - Crangon crangon - Adult                                        | 48 hours |
|                         | Acute LC50 3289 mg/l Fresh water     | Daphnia - Daphnia magna -<br>Neonate                                         | 48 hours |
|                         | Acute LC50 100000 μg/l Fresh water   | Fish - Pimephales promelas -<br>Juvenile (Fledgling, Hatchling,<br>Weanling) | 96 hours |
|                         | Chronic NOEC 9.96 mg/l Marine water  | Algae - Ulva pertusa                                                         | 96 hours |
| ethylbenzene            | Acute EC50 4600 μg/l Fresh water     | Algae - Pseudokirchneriella subcapitata                                      | 72 hours |

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| Acute EC50 3600 μg/l Fresh water  | Algae - Pseudokirchneriella subcapitata                                  | 96 hours             |
|-----------------------------------|--------------------------------------------------------------------------|----------------------|
| . 0                               | Daphnia - Daphnia magna -<br>Neonate                                     | 48 hours             |
| Acute LC50 5200 μg/l Marine water | Crustaceans - Americamysis bahia                                         | 48 hours             |
| , 0                               | Fish - Oncorhynchus mykiss<br>Algae - Pseudokirchneriella<br>subcapitata | 96 hours<br>96 hours |

#### Persistence and degradability

Not available.

#### **Bioaccumulative potential**

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-----|-----------|
| Acetone                 | -0.24  | -   | low       |
| xylene                  | 3.16   | -   | low       |
| methanol                | -0.77  | -   | low       |
| ethylbenzene            | 3.15   | -   | low       |

#### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

# 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

# 14. Transport information

|                         | DOT Classification                                                              | IMDG                                                                           | IATA                                                                           |
|-------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| UN number               | UN1993                                                                          | UN1993                                                                         | UN1993                                                                         |
| UN proper shipping name | FLAMMABLE LIQUIDS, N.O. S. (Acetone, Solvent naphtha (petroleum), light aliph.) | FLAMMABLE LIQUIDS, N.O.S. (acetone, Solvent naphtha (petroleum), light aliph.) | FLAMMABLE LIQUIDS, N.O.S. (acetone, Solvent naphtha (petroleum), light aliph.) |
|                         |                                                                                 |                                                                                |                                                                                |
|                         |                                                                                 |                                                                                |                                                                                |

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#### **Transport information** 14.

| Transport hazard class(es) | 3   | 3                                     | 3                                                                                                                                                                    |
|----------------------------|-----|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packing group              | II  | II                                    | II                                                                                                                                                                   |
| Environmental hazards      | No. | No.                                   | No.                                                                                                                                                                  |
| Additional information     |     | Emergency schedules (EmS)<br>F-E, S-E | Passenger and Cargo Aircraft Quantity limitation: 5 L Cargo Aircraft Only Quantity limitation: 60 L Limited Quantities - Passenger Aircraft Quantity limitation: 1 L |

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

#### **Regulatory information 15**.

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: ethylbenzene

Clean Water Act (CWA) 311: xylene; ethylbenzene

Clean Air Act Section 112 : Listed

(b) Hazardous Air **Pollutants (HAPs)** 

**DEA List II Chemicals** : Listed

(Essential Chemicals)

**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 Delayed (chronic) health hazard

#### **Composition/information on ingredients**

| Name         | Fire hazard | Sudden<br>release of<br>pressure | Reactive | Immediate<br>(acute)<br>health<br>hazard | Delayed<br>(chronic)<br>health<br>hazard |
|--------------|-------------|----------------------------------|----------|------------------------------------------|------------------------------------------|
| acetone      | Yes.        | No.                              | No.      | Yes.                                     | Yes.                                     |
| xylene       | Yes.        | No.                              | No.      | Yes.                                     | Yes.                                     |
| methanol     | Yes.        | No.                              | No.      | Yes.                                     | Yes.                                     |
| ethylbenzene | Yes.        | No.                              | No.      | Yes.                                     | Yes.                                     |

# 15. Regulatory information

#### **SARA 313**

|                                 | Product name                       | CAS number                       |
|---------------------------------|------------------------------------|----------------------------------|
| Form R - Reporting requirements | xylene<br>methanol<br>ethylbenzene | 1330-20-7<br>67-56-1<br>100-41-4 |
| Supplier notification           | xylene<br>methanol<br>ethylbenzene | 1330-20-7<br>67-56-1<br>100-41-4 |

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

#### **State regulations**

Massachusetts : The following components are listed: ACETONE; XYLENE; METHANOL; ETHYL

**BENZENE** 

New York : The following components are listed: Acetone; 2-Propanone; Xylene (mixed); Methanol;

Ethylbenzene

New Jersey: The following components are listed: ACETONE; 2-PROPANONE; XYLENES;

BENZENE, DIMETHYL-; METHYL ALCOHOL; METHANOL; ETHYL BENZENE;

BENZENE. ETHYL-

Pennsylvania: The following components are listed: 2-PROPANONE; BENZENE, DIMETHYL-;

METHANOL; BENZENE, ETHYL-

#### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

| Ingredient name          | Cancer      | Reproductive | No significant risk level                                 | Maximum acceptable dosage level |
|--------------------------|-------------|--------------|-----------------------------------------------------------|---------------------------------|
| methanol<br>ethylbenzene | No.<br>Yes. | Yes.<br>No.  | No.<br>41 μg/day (ingestion)<br>54 μg/day<br>(inhalation) | No.<br>No.                      |

**United States inventory** 

(TSCA 8b)

: All components are listed or exempted.

Canada

WHMIS (Canada) : Class B-2: Flammable liquid

Class D-1B: Material causing immediate and serious toxic effects (Toxic).

Class D-2A: Material causing other toxic effects (Very toxic). Class D-2B: Material causing other toxic effects (Toxic).

**Canadian lists** 

**Canadian NPRI**: The following components are listed: Volatile organic compounds; Solvent naphtha light

aliphatic; Xylene (all isomers); Methanol; Ethylbenzene

**CEPA Toxic substances**: The following components are listed: Volatile organic compounds

**Canada inventory** : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**International regulations** 

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# 15. Regulatory information

**International lists** 

: Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted.

Japan inventory: Not determined.

**Korea inventory**: All components are listed or exempted. **Malaysia Inventory (EHS Register)**: Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

# 16. Other information

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



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.)** 



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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.

#### **History**

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**Key to abbreviations** : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

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# 16. Other information

UN = United Nations

**References** : Not available.

**▼** Indicates information that has changed from previously issued version.

#### **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.

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