SAFETY DATA SHEET

1. Identification

Product identifier MR.JAN GLASS & WINDOW CLEANER 539G

Other means of identification

Product code 1000021565

Recommended use CLEANER

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name MR.JANITORIAL SUPPLIES.
Address 1125 KERRISDALE BLVD
NEWMARKET, ON L3Y 8W1

Canada

Telephone General Assistance 1-905-836-4250

E-mail Not available.

Emergency phone number Emergency - Outside US 1-866-836-8855

Emergency - Outside US 1-952-852-4646

Supplier Not available.

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1

Health hazards Not classified.

Label elements



Signal word Danger

Hazard statement Extremely flammable aerosol.

Precautionary statement

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

Response Wash hands after handling.

Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal Disposal Dispose of waste and residues in accordance with local authority requirements.

Other hazards None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % | |
|---------------------------------|--------------------------|------------|----------|--|
| 2-Butoxyethanol | | 111-76-2 | 2.864 | |
| Isobutane | | 75-28-5 | 2.289 | |
| Propane | | 74-98-6 | 2.261 | |
| Ethyl Alcohol | | 64-17-5 | 1.89 | |
| Ammonium Hydroxide | | 1336-21-6 | 0.142 | |
| Other components below reportab | le levels | | 90.55401 | |

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms persist. Wash off with soap and water. Get medical attention if irritation develops and persists. Skin contact

Rinse with water. Get medical attention if irritation develops and persists. **Eye contact**

Ingestion Rinse mouth. Get medical attention if symptoms occur. Most important Direct contact with eyes may cause temporary irritation.

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Specific hazards arising from the chemical

Special protective equipment

and precautions for firefighters

Fire fighting

equipment/instructions

Specific methods

General fire hazards

Not available.

Do not use water jet as an extinguisher, as this will spread the fire.

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not

breathe fumes.

Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not get in eyes, on skin, or on clothing. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Level 1 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame. heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

| US. ACGIH Threshold Limit Values | | |
|---|---------------------------------|--|
| Components | Туре | Value |
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 20 ppm |
| Ethyl Alcohol (CAS 64-17-5) | STEL | 1000 ppm |
| lsobutane (CAS 75-28-5) | STEL | 1000 ppm |
| Canada. Alberta OELs (Occupation | al Health & Safety Code, Sc | hedule 1, Table 2) |
| Components | Туре | Value |
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 97 mg/m3 |
| | | 20 ppm |
| Ethyl Alcohol (CAS 64-17-5) | TWA | 1880 mg/m3 |
| | | 1000 ppm |
| Propane (CAS 74-98-6) | TWA | 1000 ppm |
| Canada. British Columbia OELs. (C Safety Regulation 296/97, as amend | | s for Chemical Substances, Occupational Health and |
| Components | Туре | Value |
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 20 ppm |
| Ethyl Alcohol (CAS 64-17-5) | STEL | 1000 ppm |
| Canada. Manitoba OELs (Reg. 217/ | 2006, The Workplace Safety | And Health Act) |
| Components | Туре | Value |
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 20 ppm |
| Ethyl Alcohol (CAS 64-17-5) | STEL | 1000 ppm |
| sobutane (CAS 75-28-5) | STEL | 1000 ppm |
| Canada. Ontario OELs. (Control of | Exposure to Biological or C | hemical Agents) |
| Components | Туре | Value |
| 2-Butoxyethanol (CAS 111-76-2) | TWA | 20 ppm |
| Ethyl Alcohol (CAS 64-17-5) | STEL | 1000 ppm |
| sobutane (CAS 75-28-5) | TWA | 800 ppm |
| Canada. Quebec OELs. (Ministry of Components | Labor - Regulation Respect Type | ting the Quality of the Work Environment) Value |
| • | | |
| 2-Butoxyethanol (CAS | TWA | 97 mg/m3 |
| | | |
| 111-76-2) | T1444 | 20 ppm |
| 111-76-2) Ethyl Alcohol (CAS 64-17-5) | TWA | 1880 mg/m3 |
| 111-76-2) Ethyl Alcohol (CAS 64-17-5) | | 1880 mg/m3 1000 ppm |
| 111-76-2) | TWA TWA | 1880 mg/m3 1000 ppm 1800 mg/m3 |
| 111-76-2) Ethyl Alcohol (CAS 64-17-5) | | 1880 mg/m3 1000 ppm |

ACGIH Biological Exposure Indices

| Components | Value | Determinant | Specimen | Sampling Time |
|-----------------------------------|----------|--|---------------------|---------------|
| 2-Butoxyethanol (CAS 111-76-2) | 200 mg/g | Butoxyacetic acid (BAA), with hydrolysis | Creatinine in urine | * |

^{* -} For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). **Eye/face protection**

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove

supplier.

Other Wear suitable protective clothing.

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an Respiratory protection

air-supplied respirator.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work

clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Gas. Physical state **Form** Aerosol. Not available. Color Odor Not available. **Odor threshold** Not available. Not available. pН **Melting point/freezing point** Not available. Initial boiling point and boiling Not available.

range

-156.0 °F (-104.4 °C) PROPELLANT estimated Flash point

Not available. **Evaporation rate** Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

23.01 psig @70F estimated Vapor pressure

Not available. Vapor density Relative density Not available.

Solubility(ies)

Not available. Solubility (water) Not available. **Partition coefficient**

(n-octanol/water) **Auto-ignition temperature**

Decomposition temperature

Not available. Not available. Not available.

Other information

Explosive properties 3.29 kJ/g estimated Heat of combustion (NFPA

30B)

Viscosity

Oxidizing properties Not oxidizing. Specific gravity 0.972 estimated

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

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Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation No adverse effects due to inhalation are expected.

Skin contact 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

| Components | Species | Test Results |
|-----------------------------|-------------------|-------------------------|
| 2-Butoxyethanol (CAS 111-7 | ['] 6-2) | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Guinea pig | 7.3 ml/kg, 4 Days |
| | | 0.23 ml/kg, 24 Hours |
| | Rabbit | 435 mg/kg, 24 Hours |
| | | 0.68 ml/kg, 24 Hours |
| | | 0.63 ml/kg |
| | Rat | > 2000 mg/kg, 24 Hours |
| Inhalation | | |
| LC50 | Rabbit | 400 ppm, 7 Hours |
| | Rat | 450 ppm, 4 Hours |
| Oral | | |
| LD100 | Rabbit | 695 mg/kg |
| LD50 | Dog | > 695 mg/kg |
| | Guinea pig | 1414 mg/kg |
| | Mouse | 1519 mg/kg |
| | Rat | 1746 mg/kg |
| Ethyl Alcohol (CAS 64-17-5) | | |
| <u>Acute</u> | | |
| Inhalation | | |
| LC50 | Cat | 85.41 mg/l, 4.5 Hours |
| | | 43.68 mg/l, 6 Hours |
| | Mouse | > 60000 ppm |
| | | 79.43 mg/l, 134 Minutes |
| | Rat | > 115.9 mg/l, 4 Hours |
| | | 51.3 mg/l, 6 Hours |
| Oral | | |
| LD50 | Monkey | 6000 mg/kg |
| | Mouse | 10500 ml/kg |

| Components | Species | Test Results |
|-------------------------|---------|------------------------|
| | Pig | > 5000 mg/kg |
| | Rat | 10470 mg/kg |
| | | 7800 ml/kg |
| Isobutane (CAS 75-28-5) | | |
| <u>Acute</u> | | |
| Inhalation | | |
| LC50 | Mouse | 1237 mg/l, 120 Minutes |
| | | 52 %, 120 Minutes |
| | Rat | 1355 mg/l |
| Propane (CAS 74-98-6) | | |
| <u>Acute</u> | | |
| Inhalation | | |
| LC50 | Mouse | 1237 mg/l, 120 Minutes |
| | | 52 %, 120 Minutes |
| | Rat | 1355 mg/l |
| | | 658 mg/l/4h |
| | | |

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

2-Butoxyethanol (CAS 111-76-2) Irritant

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Carcinogenicity

ACGIH Carcinogens

2-Butoxyethanol (CAS 111-76-2) A3 Confirmed animal carcinogen with unknown relevance to

humans.

Canada - Manitoba OELs: carcinogenicity

2-BUTOXYETHANOL (EGBE) (CAS 111-76-2) Confirmed animal carcinogen with unknown relevance to humans. ETHANOL (CAS 64-17-5) Confirmed animal carcinogen with unknown relevance to humans.

This product is not expected to cause reproductive or developmental effects.

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

Reproductive toxicity

Not classified.

repeated exposure

Not likely, due to the form of the product. **Aspiration hazard** May be harmful if absorbed through skin. **Chronic effects**

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

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prolonged. These effects have not been observed in humans.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components | | Species | Test Results |
|-----------------------|-----------------|---|-----------------------------|
| 2-Butoxyethanol (CAS | 3 111-76-2) | | |
| Aquatic | | | |
| Fish | LC50 | Inland silverside (Menidia beryllina) | 1250 mg/l, 96 hours |
| Ammonium Hydroxide | (CAS 1336-21-6) | | |
| Aquatic | | | |
| Crustacea | EC50 | Daphnia | 0.66 mg/L, 48 Hours |
| Fish | LC50 | Western mosquitofish (Gambusia affinis) | 15 mg/l, 96 hours |
| Ethyl Alcohol (CAS 64 | -17-5) | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 7700 - 11200 mg/l, 48 hours |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | > 100.1 mg/l, 96 hours |
| | | | |

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-Butoxyethanol 0.83
Ethyl Alcohol -0.31
Isobutane 2.76
Propane 2.36

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance

 $with \ local/regional/national/international\ regulations.$

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

14. Transport information

TDG

UN number UN1950

UN proper shipping name AEROSOLS, flammable

Transport hazard class(es)

Class 2.1 Subsidiary risk -

Packing group Not applicable.

Environmental hazards D

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity.

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable

Transport hazard class(es)

Class 2.1
Subsidiary risk Label(s) 2.1

Packing group Not applicable.

Environmental hazards No. **ERG Code** 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety

instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only

Allowed with restrictions.

Not applicable.

IMDG

UN number UN1950 **UN proper shipping name AEROSOLS**

Transport hazard class(es)

Class 2.1 **Subsidiary risk** Label(s) 2.1

Packing group Not applicable.

Environmental hazards

Marine pollutant No. F-D, S-U **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling. Read safety

instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IATA; IMDG; TDG



15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Issue date 02-15-2017

Version # 01

DisclaimerWe cannot anticipate all conditions under which this information and its product, or the products of

other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written

based on the best knowledge and experience currently available.

Revision information Product and Company Identification: Alternate Trade Names