



Issue Date 14-Jan-2013

Revision Date: 02-Aug-2013

Version 1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

SDS # BE-6013-EU
Product Code 6013, E6013
Product Name Buckeye Eco Multi-Purpose Glass Cleaner

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended Use Concentrated glass cleaner Waterbased

1.3. Details of the Supplier of the Safety Data Sheet

| | | |
|---|--|---|
| Importer UK Contact David Pinder, EU General Manager 12 Paskin Close Fradley Village, NR Lichfield Staffordshire, WS13 8NZ UK | REACH Only Representative TSGE TSGE@TSGEurope.com | Supplier Buckeye International, Inc. 2700 Wagner Place Maryland Heights, MO 63043 USA |
|---|--|---|

For further information, please contact

Contact Point David Pinder, EU General Manager: 011447788432884
 Buckeye International, Inc.: 1-314-291-1900
Email Address info@buckeyeinternational.com

1.4. Emergency telephone number

| | | |
|-----------------------------|------------------|---|
| Emergency Telephone (24 hr) | (Medical) | 1-651-632-8956 (International) 1-800-303-0441 (North America) |
| | (Transportation) | INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America) |

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Regulation (EC) No 1272/2008

| | |
|--|------------|
| Specific target organ toxicity (single exposure) | Category 3 |
| Flammable Liquids | Category 3 |

Classification according to 67/548/EEC
 Full text of R-phrases: see section 16

R-code(s)
 R10 - R67

2.2. Label Elements



Signal Word

Warning

Hazard Statements

H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H226 - Flammable liquid and vapor

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 P240 - Ground/bond container and receiving equipment
 P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment
 P242 - Use only non-sparking tools
 P243 - Take precautionary measures against static discharge
 P280 - Wear protective gloves and eye/face protection
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P271 - Use only outdoors or in a well-ventilated area
 P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P312 - Call a POISON CENTER or doctor if you feel unwell
 P403 + P235 - Store in a well-ventilated place. Keep cool
 P233 - Keep container tightly closed
 P405 - Store locked up
 P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other Hazards

General Hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

| Chemical Name | EC No | CAS No | Weight-% | Classification according to 67/548/EEC | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH Registration Number |
|-----------------------------------|---------|----------|----------|--|--|---------------------------|
| Propylene glycol monomethyl ether | Present | 107-98-2 | <60 | R10 R67 | STOT SE 3 (H336) Flam. Liq. 3 (H226) Flam. Liq. 3 (H226) STOT SE 3 (inhalation) | Not determined |

Full text of R-phrases: see section 16

Full text of H- and EUH-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

| | |
|---------------------|--|
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation persists. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Take off contaminated clothing. Wash contaminated clothing before reuse. |
| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if you feel unwell. |
| Ingestion | Drink 2-3 large glasses of water. Do not induce vomiting. Call a physician. Never give anything by mouth to an unconscious person. |

4.2. Most Important Symptoms and Effects, Both Acute and Delayed

| | |
|-----------------|--|
| Symptoms | Contact may cause irritation and redness. Can cause defatting of skin tissue. May cause respiratory irritation. May cause drowsiness or dizziness. |
|-----------------|--|

4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Not determined

5.2. Special Hazards Arising from the Substance or Mixture

Combustion products may be toxic

| | |
|--------------------------------------|----------------------------------|
| Hazardous Combustion Products | Carbon oxides. Oxides of sulfur. |
|--------------------------------------|----------------------------------|

5.3. Advice for Firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions

Use personal protective equipment as required.

For Emergency Responders

Use personal protection recommended in Section 8.

6.2. Environmental Precautions

Collect spillage.

6.3. Methods and Material for Containment and Cleaning Up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up

Pick up with mop, wet/dry vac, or absorbent material. Rinse area with clear water and allow floor to dry before allowing traffic.

6.4. Reference to Other Sections

See Section 13, Disposal Considerations, for additional information.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Advice on Safe Handling

Keep out of the reach of children. Use only in well-ventilated areas. Avoid breathing vapors or mists. Use spark-proof tools and explosion-proof equipment. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Take precautionary measures against static discharges.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after handling.

7.2. Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use. Store at room temperature. Store locked up.

7.3. Specific End Use(s)

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Exposure Limits

| Chemical Name | European Union | United Kingdom | France | Spain | Germany |
|---|---|--|---|--|--|
| Propylene glycol monomethyl ether 107-98-2 | S* TWA 100 ppm TWA 375 mg/m ³ STEL 150 ppm STEL 568 mg/m ³ | STEL: 150 ppm STEL: 560 mg/m ³ TWA: 100 ppm TWA: 375 mg/m ³ Skin | TWA: 50 ppm TWA: 188 mg/m ³ STEL: 100 ppm STEL: 375 mg/m ³ | S* STEL: 150 ppm STEL: 568 mg/m ³ TWA: 100 ppm TWA: 375 mg/m ³ | TWA: 100 ppm TWA: 370 mg/m ³ Ceiling / Peak: 200 ppm Ceiling / Peak: 740 mg/m ³ |
| Component | Italy | Portugal | Netherlands | Finland | Denmark |
| Propylene glycol monomethyl ether 107-98-2 (<60) | TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 568 mg/m ³ Skin | STEL: 150 ppm TWA: 100 ppm | Skin STEL: 563 mg/m ³ TWA: 375 mg/m ³ | TWA: 100 ppm TWA: 370 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³ Skin | TWA: 50 ppm TWA: 185 mg/m ³ Skin |
| Chemical Name | Austria | Switzerland | Poland | Norway | Ireland |
| Propylene glycol monomethyl ether 107-98-2 | Skin STEL 50 ppm STEL 187 mg/m ³ TWA: 50 ppm TWA: 187 mg/m ³ Ceiling 50 ppm Ceiling 187 mg/m ³ | STEL: 200 ppm STEL: 720 mg/m ³ TWA: 100 ppm TWA: 360 mg/m ³ | STEL: 360 mg/m ³ TWA: 180 mg/m ³ | TWA: 50 ppm TWA: 180 mg/m ³ Skin STEL: 75 ppm STEL: 225 mg/m ³ | TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 568 mg/m ³ |

8.2. Exposure Controls

Engineering Controls

Apply technical measures to comply with the occupational exposure limits.

Personal Protective Equipment

Eye/Face Protection

Risk of contact: Wear approved safety goggles.

Hand Protection

Rubber gloves.

Skin and Body Protection

Suitable protective clothing.

Respiratory Protection

No protective equipment is needed under normal use conditions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

| | | | |
|-------------------------------------|---|-------------------------|-------------------------|
| Physical State | Liquid | Odor | None No fragrance added |
| Appearance | Clear blue liquid | Odor Threshold | Not determined |
| Color | Blue | | |
| Property | Values | Remarks • Method | |
| pH | 8.20 ± 0.5 (conc) 5.98 ± 0.5 (1:42 dilution) | | |
| Melting Point/Freezing Point | 0 °C / 32 °F | | |
| Boiling Point/Boiling Range | 100 °C / 212 °F | | |
| Flash Point | < 54 °C / < 130 °F | Tag Closed Cup | |
| Evaporation Rate | 1.0 | (Water = 1) | |
| Flammability (Solid, Gas) | n/a-liquid | | |
| Flammability Limits in Air | | | |
| Upper Flammability Limits | Not applicable | | |
| Lower Flammability Limit | Not applicable | | |
| Vapor Pressure | Not determined | | |
| Vapor Density | Not determined | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---------------------------|----------------|-------------------------|
| Specific Gravity | 0.978 | (1=Water) |
| Water Solubility | Infinite | |
| Solubility(ies) | Not determined | |
| Partition Coefficient | Not determined | |
| Autoignition Temperature | Not applicable | |
| Decomposition Temperature | Not determined | |
| Kinematic Viscosity | Not determined | |
| Dynamic Viscosity | Not determined | |
| Explosive Properties | Not determined | |
| Oxidizing Properties | Not determined | |

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not reactive under normal conditions

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization does not occur.

Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

Keep out of reach of children.

10.5. Incompatible Materials

Chlorine bleach.

10.6. Hazardous Decomposition Products

Carbon oxides. Sulfur oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information

Unknown Acute Toxicity 8% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

| | |
|-------------|-----------|
| Oral LD50 | 8,667.00 |
| UNITS | mg/kg |
| Dermal LD50 | 21,667.00 |
| UNITS | mg/kg |
| Inhalation | |
| Gas | 41,667.00 |
| UNITS | mg/L |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------------------------|----------------------|--------------------------|---|
| Propylene glycol monomethyl ether | = 5200 mg/kg (Rat) | = 13000 mg/kg (Rabbit) | = 54.6 mg/L (Rat) 4 h > 24 mg/L (Rat) 1 h |

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms Please see section 4 of this SDS for symptoms.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|-----------------------------------|----------------------|---|--|
| Propylene glycol monomethyl ether | | 20.8: 96 h Pimephales promelas g/L LC50 static 4600 - 10000: 96 h Leuciscus idus mg/L LC50 static | 23300: 48 h Daphnia magna mg/L EC50 |

12.2. Persistence and Degradability

Not determined.

12.3. Bioaccumulative Potential

| Chemical Name | Partition Coefficient |
|-----------------------------------|-----------------------|
| Propylene glycol monomethyl ether | -0.437 |

12.4. Mobility in Soil

Mobility

Not determined.

12.5. Results of PBT and vPvB Assessment

Not determined.

12.6. Other Adverse Effects

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste from Residues / Unused Products

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

Contaminated Packaging

Improper disposal or reuse of this container may be dangerous and illegal.

SECTION 14: TRANSPORT INFORMATION

IMDG

14.1 UN/ID No UN3271
14.2 Proper Shipping Name Ethers, n.o.s. (Propylene glycol methyl ether)
14.3 Hazard Class 3
14.4 Packing Group III
14.5
14.6
14.7

RID

14.1 UN/ID No UN3271
14.2 Proper Shipping Name Ethers, n.o.s. (Propylene glycol methyl ether)
14.3 Hazard Class 3
14.4 Packing Group III
14.5
14.6

ADR

14.1 UN/ID No UN3271
14.2 Proper Shipping Name Ethers, n.o.s. (Propylene glycol methyl ether)
14.3 Hazard Class 3
14.4 Packing Group III
14.5
14.6

ICAO (air)

14.1 UN/ID No UN3271
14.2 Proper Shipping Name Ethers, n.o.s. (Propylene glycol methyl ether)
14.3 Hazard Class 3
14.4 Packing Group III
14.5
14.6

IATA

14.1 UN/ID No UN3271
14.2 Proper Shipping Name Ethers, n.o.s. (Propylene glycol methyl ether)
14.3 Hazard Class 3
14.4 Packing Group III
14.5
14.6

SECTION 15: REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Occupational Illnesses (R-463-3, France)

| Chemical Name | French RG number | Title |
|---|------------------|-------|
| Propylene glycol monomethyl ether 107-98-2 | RG 84 | |

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

| | |
|---------------|--------|
| TSCA | Listed |
| EINECS/ELINCS | - |
| DSL/NDSL | - |
| PICCS | - |
| ENCS | - |
| IECSC | - |
| AICS | - |
| KECL | - |

Legend

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier

SECTION 16: OTHER INFORMATION

Safety Data Sheet Status

The Risk Phrases/Hazard Statements listed below in Section 16 are related to the Raw Materials (ingredients) in the Product (as listed in Section 3) and NOT only the product itself. For the Risk Phrases/Hazard Statements relating to this Product see Section 2.

Full text of R-phrases referred to under sections 2 and 3

R10 - Flammable

R67 - Vapors may cause drowsiness and dizziness

Full text of H-Statements referred to under sections 2 and 3

H336 - May cause drowsiness or dizziness

H226 - Flammable liquid and vapor

Classification Procedure

Calculation method

Issue Date 14-Jan-2013

Revision Date: 02-Aug-2013

Revision Note New format.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Regulation (EU) No. 453/2010

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet