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

1.1. Product Identifier

SDS # BE-6012-EU
Product Code E/S 6012
Product Name Buckeye Eco Glass Cleaner HD

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

Recommended Use Concentrated glass cleaner Water based

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

Manufacturer
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) 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

2.2. Label Elements

Product Identifier
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Signal Word
None

EUH210 - Safety data sheet available on request

2.3. Other Hazards

No information available
Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 MIXTURES

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>EC No</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>REACH Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>Present</td>
<td>107-98-2</td>
<td>15-20</td>
<td>STOT SE 3 (H336) Flam. Liq. 3 (H226)</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

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

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

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 doctor if irritation persists.
- **Skin Contact**: Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a doctor.
- **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 doctor. 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.

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 sulphur.

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
See Section 12 for additional Ecological Information.

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.

Section 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Advice on Safe Handling
Keep out of the reach of children.

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)

Specific Use(s)
Concentrated Glass Cleaner, Water Based.

Risk Management Methods (RMM)
The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSOANL PROTECTION

8.1. Control Parameters

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>European Union</th>
<th>United Kingdom</th>
<th>France</th>
<th>Spain</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>TWA: 100 ppm</td>
<td>STEL: 560 mg/m³</td>
<td>TWA: 50 ppm</td>
<td>STEL: 150 ppm</td>
<td>TWA: 100 ppm</td>
</tr>
<tr>
<td>107-98-2</td>
<td>TWA: 375 mg/m³</td>
<td>TWA: 100 ppm</td>
<td>TWA: 188 mg/m³</td>
<td>STEL: 100 ppm</td>
<td>TWA: 100 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL: 150 ppm</td>
<td>TWA: 375 mg/m³</td>
<td>STEL: 375 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STEL: 568 mg/m³</td>
<td></td>
<td>Skin</td>
<td>STEL: 568 mg/m³</td>
<td>TWA: 375 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear blue liquid</td>
<td>Odour</td>
</tr>
<tr>
<td>Colour</td>
<td>Blue</td>
<td>Odour Threshold</td>
</tr>
<tr>
<td>Odour</td>
<td>Ocean surf fragrance</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>7.5 ± 0.5 (conc)</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>7.0 ± 0.5 (1:16 dilution)</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>100 °C / 32 °F</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>68 °C / 154 °F</td>
<td>Tag Closed Cup</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>1.0</td>
<td>(n-BuAc =1)</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>n/a-liquid</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapour Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.00</td>
<td>@ 60°F (ASTM D 1298)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Mostly Soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidising Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>
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 Polymerisation
Hazardous polymerisation 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. Sulphur 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.

Inhalation  Do not inhale.
Eye Contact  Avoid contact with eyes.
Skin Contact  Avoid contact with skin.
Ingestion  Do not ingest.

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

ATEmix (oral)  30,303.03 mg/kg
ATEmix (dermal)  78,787.90 mg/kg
ATEmix (inhalation-vapour)  207.02 mg/L

Unknown Acute Toxicity
0 % of the mixture consists of ingredient(s) of unknown toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>= 5000 mg/kg (Rat)</td>
<td>= 13 g/kg (Rabbit)</td>
<td>&gt; 7559 ppm (Rat) 6 h</td>
</tr>
</tbody>
</table>
Section 12: ECOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td></td>
<td>20.8: 96 h Pimephales promelas g/L</td>
<td>23300: 48 h Daphnia magna mg/L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 static 4600 - 10000: 96 h</td>
<td>EC50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leuciscus idus mg/L LC50 static</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and Degradability
Not determined.

12.3. Bioaccumulative Potential

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>-0.437</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Waste from residues/unused products</th>
<th>Disposal should be in accordance with applicable regional, national and local laws and regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contaminated Packaging</td>
<td>Improper disposal or reuse of this container may be dangerous and illegal.</td>
</tr>
</tbody>
</table>
Section 14: TRANSPORT INFORMATION

IMDG
14.2 Proper Shipping Name
Not regulated

RID
14.2 Proper Shipping Name
Not regulated

ADR
14.2 Proper Shipping Name
Not regulated

IATA
14.2 Proper Shipping Name
Not regulated

Section 15: REGULATORY INFORMATION

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

Occupational Illnesses (R-463-3, France)
France

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>French RG number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>RG 84</td>
<td></td>
</tr>
</tbody>
</table>

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.

Authorisations and/or restrictions on use:
This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants
Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

International Inventories
Not determined.

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/ELINCS</th>
<th>PICCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>AICS</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>107-98-2 (15-20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alpha Olefin Sulfonate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>68784-79-2 (&lt;1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
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 H-Statements referred to under section 3
H226 - Flammable liquid and vapour
H336 - May cause drowsiness or dizziness

Legend
SVHC: Substances of Very High Concern for Authorisation:

Legend
TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)
Ceiling Maximum limit value *

Classification Procedure
Calculation method

Issue Date: 14-Jan-2013
Revision Date: 11-Dec-2019
Revision Note: Reformulation.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2015/830

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