

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**Product code** : KU400GCG01  
**Product name** : GLASS CLEANER; 1LT  
**Manufacturer / Distributor** : Flint Group,  
Print Media Europe,  
Varn House,  
Northbank Industrial Park,  
Irlam,  
Greater Manchester,  
M44 5BL  
England.  
**e-mail address of person responsible for this SDS** : compliance.centre@flintgrp.com  
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**History**

**Date of printing** : 22.06.2011.  
**Date of issue/ Date of revision** : 29.09.2010.  
**Date of previous issue** : No previous validation.  
**Version** : 2

**2. HAZARDS IDENTIFICATION****Classification and labeling according to Regulation (EC) 1907/2006 (REACH)**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Not classified.  
**Additional warning phrases and Additional information** : Safety Data Sheet available for professional user on request.  
**Risk phrases** : This product is not classified according to EU legislation.  
**Safety phrases** : Not applicable.  
**Contains** :

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name	%	REACH Registration number	CAS number	EC number	Classification
2-butoxyethanol	1-3		111-76-2	203-905-0	Xn; R20/21/22 Xi; R36/38
propan-2-ol	1-5		67-63-0	200-661-7	F; R11 Xi; R36 R67

See section 16 for the full text of the R-phrases declared above

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in section 8.

Hazardous ingredients / Classification according to Regulation (EC) 1272/2008 (CLP)

Chemical name	CAS number	Classification
2-butoxyethanol	111-76-2	ACUTE TOXICITY: ORAL - Category 3 ACUTE TOXICITY: SKIN - Category 3 ACUTE TOXICITY: INHALATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
propan-2-ol	67-63-0	FLAMMABLE LIQUIDS - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3

**4. FIRST AID MEASURES****First aid measures**

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention/advice.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Give nothing by mouth. Do NOT induce vomiting.

**5. FIRE-FIGHTING MEASURES**

- Extinguishing media** : Recommended:., alcohol-resistant foam, CO<sub>2</sub>, powders, water spray
- Extinguishing media not to be used** : Do not use water jet.
- Recommendations** : Fire will produce dense black smoke., Exposure to decomposition products may cause a health hazard., Appropriate breathing apparatus may be required., Cool closed containers exposed to fire with water., Do not release runoff from fire to drains or watercourses.

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## 6. ACCIDENTAL RELEASE MEASURES

Due to the organic solvents content of the preparation:

- Personal precautions** : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or spray. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions** : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.
- Methods for cleaning up** : 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). Preferably clean with a detergent. Avoid using solvents.

**Note:** see section 8 for personal protective equipment and section 13 for waste disposal.

## 7. HANDLING AND STORAGE

- Handling** : Due to the organic solvents content of the preparation: Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see section 8). Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws.
- Storage** : Store in accordance with local regulations. Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.

Due to the organic solvents content of the preparation:

Keep away from sources of ignition. Keep away from: oxidizing agents, strong alkalis, strong acids.

No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredient name	Occupational exposure limits
2-butoxyethanol	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007). Absorbed through skin.</b> STEL: 50 ppm 15 minute(s). TWA: 25 ppm 8 hour(s).
propan-2-ol	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b> STEL: 1250 mg/m <sup>3</sup> 15 minute(s). STEL: 500 ppm 15 minute(s). TWA: 999 mg/m <sup>3</sup> 8 hour(s). TWA: 400 ppm 8 hour(s).

- Exposure controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

### Occupational exposure controls

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Respiratory system</b>	: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.  Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.
<b>Skin and body</b>	: Personnel should wear antistatic clothing made of natural fibers or of high-temperature-resistant synthetic fibers.
<b>Hands</b>	: The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
<b>Gloves</b>	: For prolonged or repeated handling, use the following type of gloves:  Recommended: butyl rubber, foil, fluor rubber May be used: nitrile rubber, neoprene Not recommended: PVC
<b>Gloves</b>	: None available.
<b>Eyes</b>	: Use safety eyewear designed to protect against splash of liquids.
<b>Environmental exposure controls</b>	: Do not allow to enter drains or watercourses.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

<b>Physical state</b>	: Liquid.
<b>Color</b>	: Colorless.
<b>Odor</b>	: Characteristic.
<b>Odor threshold</b>	: Not available.

### Important health, safety and environmental information

<b>pH</b>	: Not available.
<b>Boiling point</b>	: >= 100 °C
<b>Melting point</b>	: Not available.
<b>Flash point</b>	: Closed cup: 62°C [MEASURED]
<b>Explosive properties</b>	: Non-explosive in the presence of the following materials or conditions: shocks and mechanical impacts.
<b>Lower explosion limit</b>	: Not available.
<b>Oxidizing properties</b>	: Not available.
<b>Vapor pressure</b>	: <= 23 hPa
<b>Density</b>	: ~ 1 g/cm <sup>3</sup>
<b>Solubility</b>	: Soluble in water in any proportion.
<b>Octanol/water partition coefficient</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Auto-ignition temperature</b>	: ca 204 °C

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## 10. STABILITY AND REACTIVITY

- Conditions to avoid** : Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products.
- Materials to avoid** : Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
- Hazardous decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

## 11. TOXICOLOGICAL INFORMATION

There is no data available on the preparation itself. The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments. See sections 3 and 15 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

### Toxicokinetics

- Absorption** : Not available.
- Distribution** : Contains material which causes damage to the following organs: eye, lens or cornea.  
Contains material which may cause damage to the following organs: blood, kidneys, liver, lymphatic system, upper respiratory tract, skin, central nervous system (CNS).
- Metabolism** : Not available.
- Elimination** : Not available.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-butoxyethanol	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
	LD50 Dermal	Rabbit	220 mg/kg	-
propan-2-ol	LD50 Oral	Rat	250 mg/kg	-
	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

**Chronic toxicity** : Not available.

**Carcinogenicity** : Not available.

**Mutagenicity** : Not available.

**Teratogenicity** : Not available.

**Reproductive toxicity** : Not available.

## 12. ECOLOGICAL INFORMATION

There is no data available on the preparation itself.  
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure

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## 12. ECOLOGICAL INFORMATION

2-butoxyethanol	Acute EC50 >1000 mg/L Fresh water	Daphnia - Daphnia magna - <24 hours	48 hours
	Acute LC50 800000 ug/L Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1250000 ug/L Marine water	Fish - Menidia beryllina - 40 to 100 mm	96 hours
	Chronic NOEC 1000 mg/L Fresh water	Daphnia - Daphnia magna - <24 hours	48 hours
propan-2-ol	Acute LC50 1400000 ug/L Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 >1400000 ug/L	Fish - Gambusia affinis - 20 to 30 mm	96 hours

### Ecological information

#### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Not available.				

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Not available.			

#### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Not available.			

PBT : Not applicable.

vPvB : Not applicable.

## 13. DISPOSAL CONSIDERATIONS

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**European waste catalogue (EWC)** : The European Waste Catalogue classification of this product, when disposed of as waste, is: 08 03 13 waste ink other than those mentioned in 08 03 12 If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

**Hazardous waste** : No.

## 14. TRANSPORT INFORMATION

### International transport regulations

**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.

**This product is not regulated for carriage according to ADR/RID, IMDG, ICAO/IATA.**

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## 15. REGULATORY INFORMATION

<b>Chemical Safety Assessment</b>	: This product contains substances for which Chemical Safety Assessments are still required.
<b>EU regulations</b>	: The product is not classified as dangerous according to Directive 1999/45/EC and its amendments. See sections 2 and 3 for details.
<b>VOC content</b>	: ~ 6.7 %                      ~ 66.952265 %
<b>Europe inventory</b>	: All components are listed or exempted.
<b>Industrial use</b>	: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

## 16. OTHER INFORMATION

<b>CEPE MSDS Code</b>	: 2
<b>Full text of R-phrases referred to in sections 2 and 3 - Europe</b>	: R11- Highly flammable. R20/21/22- Harmful by inhalation, in contact with skin and if swallowed. R36- Irritating to eyes. R36/38- Irritating to eyes and skin. R67- Vapors may cause drowsiness and dizziness.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

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**Version** : 2

Indicates information that has changed from previously issued version.

### Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

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