SAFETY DATA SHEET **OWN LABEL GLASS CLEANER**

According to Regulation (EU) No 453/2010

Lion Glass Cleaner 660ml Aerosol 548

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) F+;R12.

Human health

May irritate eyes. See section 11 for additional information on health hazards.

Physical and Chemical Hazards

Aerosol containers can explode when heated, due to excessive pressure build-up. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements

Detergent Labelling:

5 - < 15%



Aliphatic hydrocarbons perfumes



R12

S2 S9 S16

Extremely flammable

Labelling

Safety Phrases

	Keep out of the reach of children.
	Keep container in a well-ventilated place.
i	Keep away from sources of ignition - No smoking.

Extremely flammable.

S51	Use only in well-ventilated areas.
A1	Pressurized container: protect from sunlight and do not expose to temperature
	exceeding 50°C. Do not pierce or burn, even after use.
A2	Do not spray on a naked flame or any incandescent material.
S23	Do not breathe vapour/spray.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

2-BUTOXYETHANOL			1-5%
CAS-No.: 111-76-2	EC No.: 203-905-0		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Acute Tox. 4 - H302		Xn;R20/21/22	
Acute Tox. 4 - H312		Xi;R36/38	
Acute Tox. 4 - H332			
Skin Irrit. 2 - H315			
Eye Irrit. 2 - H319			
BUTANE			1-5%
CAS-No.: 106-97-8	EC No.: 203-448-7		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Gas 1 - H220		F+;R12	
ISOBUTANE			<1%
CAS-No.: 75-28-5	EC No.: 200-857-2		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Gas 1 - H220		F+;R12	
PROPAN-2-OL			1-5%
CAS-No.: 67-63-0	EC No.: 200-661-7		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Flam. Liq. 2 - H225 Eye Irrit. 2 - H319		F;R11 Xi;R36	
STOT SE 3 - H336		R67	
SODIUM NITRITE			< 1%
040 No - 7000 00 0			
CAS-No.: 7632-00-0	EC No.: 231-555-9		
Classification (EC 1272/2008) Ox. Sol. 3 - H272		Classification (67/548/EEC)	
		O;R8	
Acute Tox. 3 - H301		T;R25	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention. **Ingestion**

Do not induce vomiting. Rinse mouth thoroughly. Get medical attention.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation.

Vapours may cause drowsiness and dizziness.

Ingestion

May cause nausea, headache, dizziness and intoxication.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting.

4.3. Indication of any immediate medical attention and special treatment needed

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire, toxic gases (CO, CO2, NOx) may be formed.

Unusual Fire & Explosion Hazards

Aerosol cans may explode in a fire.

Specific hazards

Aerosol containers can explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Ventilate closed spaces before entering them. Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Avoid water in straight hose stream; will scatter and spread fire.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Transfer to a container for disposal. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Avoid contact with skin and eyes. Avoid inhalation of vapours. Wash hands after handling.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
2-BUTOXYETHANOL	WEL	25 ppm		50 ppm		Sk
BUTANE	WEL	600 ppm	1450 mg/m3	750 ppm	1810 mg/m3	
PROPAN-2-OL	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

Ingredient Comments

No exposure limits noted for ingredient(s).

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Odour	Organic solvents.
Auto Ignition Temperature (°C)	410°C - 580°C
Flammability Limit - Lower(%)	1.8%
Flammability Limit - Upper(%)	9.5%

9.2. Other information

Not determined.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not noted.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances.

10.6. Hazardous decomposition products

In case of fire, toxic gases (CO, CO2, NOx) may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

May cause irritation to the respiratory system.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged and frequent contact may cause redness and irritation.

Eye contact

Irritating to eyes.

Health Warnings

Arrhythmia, (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Route of entry

Inhalation.

Medical Symptoms

Arrhythmia, (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

Toxicological information on ingredients.

SODIUM NITRITE (CAS: 7632-00-0)

Acute toxicity: Acute Toxicity (Oral LD50) 180 mg/kg Rat REACH dossier information

OWN LABEL GLASS CLEANER BUTANE (CAS: 106-97-8)

Acute toxicity:

Acute Toxicity (Oral LD50) Technically not feasible. REACH dossier information Acute Toxicity (Dermal LD50) Technically not feasible. REACH dossier information

Acute Toxicity (Inhalation LC50)

539600 ppmV (gas) Mouse 2 hours REACH dossier information

PROPAN-2-OL (CAS: 67-63-0)

2-BUTOXYETHANOL (CAS: 111-76-2)

Acute toxicity: Acute Toxicity (Oral LD50) 5840 mg/kg Rat REACH dossier information

Acute Toxicity (Dermal LD50) 16.4 mL/kg Rabbit REACH dossier information

Acute Toxicity (Inhalation LC50) ~ 5000 ppm (vapours) Rat 6 hours REACH dossier information

Acute toxicity: Acute Toxicity (Oral LD50) 1746 mg/kg Rat REACH dossier information

Acute Toxicity (Dermal LD50) 0.63 mg/kg Rabbit REACH dossier information

Acute Toxicity (Inhalation LC50) 450 ppm (vapours) Rat 4 hours REACH dossier information

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product is not expected to be hazardous to the environment.

12.1. Toxicity

Ecological information on ingredients.

SODIUM NITRITE (CAS: 7632-00-0)

Acute Toxicity - Fish LC50 96 hours 0.54 mg/l Onchorhynchus mykiss (Rainbow trout) REACH dossier information Acute Toxicity - Aquatic Invertebrates EC50 48 hours 15.4 mg/l Daphnia magna REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 72 hours > 100 mg/l Scenedesmus subspicatus REACH dossier information NOEC 72 hours 100 mg/l Scenedesmus subspicatus REACH dossier information

BUTANE (CAS: 106-97-8)

LC50 96 hours 24.11 mg/l Species not noted REACH dossier information

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 14.22 mg/l Daphnia magna

REACH dossier information

Acute Toxicity - Aquatic Plants

EC50 96 hours 7.71 mg/l Freshwater algae REACH dossier information

PROPAN-2-OL (CAS: 67-63-0)

Acute Toxicity - Fish

LC50 96 hours 9640 mg/l Pimephales promelas (Fat-head Minnow) REACH dossier information

Acute Toxicity - Aquatic Invertebrates

LC50 24 hours > 10000 mg/l Daphnia magna REACH dossier information

2-BUTOXYETHANOL (CAS: 111-76-2)

Acute Toxicity - Fish

LC50 96 hours 1474 mg/l Onchorhynchus mykiss (Rainbow trout) REACH dossier information Acute Toxicity - Aquatic Invertebrates EC50 48 hours 1550 mg/l Daphnia magna REACH dossier information Acute Toxicity - Aquatic Plants EC50 72 hours 911 mg/l Pseudokirchnerella subcapitata REACH dossier information NOEC 72 hours 88 mg/l Pseudokirchnerella subcapitata REACH dossier information

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: Not noted.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical. Empty containers must not be burned because of explosion hazard.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
14.2. UN proper shipping name	
Proper Shipping Name	AEROSOLS
14.3. Transport hazard class(es)	
ADR/RID/ADN Class	2
ADR/RID/ADN Class	Class 2: Gases
ADR Label No.	2.1
IMDG Class	2.1
ICAO Class/Division	2.1
Transport Labels	



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant No.

14.6. Special precautions for user

EMS	F-D, S-U
Tunnel Restriction Code	(D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments	
Ingredient data updated.	
Issued By	HS&E Manager.
Revision Date	06-2012
Revision	4
Supersedes date	05-2011
Risk Phrases In Full	
R8	Contact with combustible material may cause fire.
R12	Extremely flammable.
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R11	Highly flammable
R36/38	Irritating to eyes and skin.
R36	Irritating to eyes.
R25	Toxic if swallowed.
R67	Vapours may cause drowsiness and dizziness.
R50	Very toxic to aquatic organisms.
Hazard Statements In Full	
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H222	Extremely flammable aerosol.
H220	Extremely flammable gas.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H400	Very toxic to aquatic life.