Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date: 17-Jan-2023 **Version** 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

SDS # PYR-EU-LCSGALSOL
Product Code LCS10 / LCS20 / GALSOL
Product Name PYRAMEX Lens Cleaner Liquid

Other means of identification

Pure substance/mixture Mixture

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

Recommended Use Lens cleaner

1.3. Details of the supplier of the safety data sheet

Supplier
Pyramex Safety Products Ltd
Unit 10 Lane End Farm Industrial Units
Hatt Common, RG20 0NG
UK

For further information, please contact

Contact Point Pyramex Safety Products Ltd – Tel: +44 (0) 1635 254220
Email Address jputt@pyramex.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

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

Signal word
None

Hazard statements
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]
EUH210 - Safety data sheet available on request

2.3. Other hazards

No information available.
Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Ethylene Glycol Monobutyl Ether 111-76-2	5-15	No data available	(603-014-00-0) 203-905-0	Acute Tox. 4 (H302) Acute Tox. 3 (H331) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	-	-	-

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Ethylene Glycol Monobutyl Ether 111-76-2	1200 + 470	435	Inhalation LC50 Rat 450 ppm 4 h (females, vapor, Source: NLM_PUBMED); Inhalation LC50 Rat 486 ppm 4 h (males, vapor, Source: NLM_PUBMED)	450 486 3 + 2.1749 2.3489	Inhalation LC50 Rat 450 ppm 4 h (females, vapor, Source: NLM_PUBMED); Inhalation LC50 Rat 486 ppm 4 h (males, vapor, Source: NLM_PUBMED)

+ This value is the harmonised acute toxicity estimate (ATE) listed in CLP Annex VI, Part 3. This harmonised ATE value must be used when calculating the acute toxicity estimate (ATEmix) for classifying a mixture containing the listed substance

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

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact In the case of skin irritation or allergic reactions see a physician. Wash skin with soap and water.

Ingestion Rinse mouth.

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

Symptoms Prolonged contact may cause redness and irritation.

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

Note to physicians 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.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

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 cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

Storage class (TRGS 510) Storage class 10.

7.3. Specific end use(s)

Specific Use(s)
Eyeglass lens cleaner.

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	Austria	Belgium	Bulgaria	Croatia
Ethylene Glycol Monobutyl Ether 111-76-2	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 *	TWA: 20 ppm TWA: 98 mg/m^3 STEL 40 ppm STEL 200 mg/m^3 H*	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 D*	STEL: 50 ppm STEL: 246 mg/m^3 TWA: 20 ppm TWA: 98 mg/m^3 K*	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 *
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Ethylene Glycol Monobutyl Ether 111-76-2	* STEL: 50 ppm STEL: 246 mg/m^3 TWA: 20 ppm TWA: 98 mg/m^3	TWA: 100 mg/m^3 Ceiling: 200 mg/m^3 D*	TWA: 20 ppm TWA: 98 mg/m^3 H*	S+ TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 A*	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 250 mg/m^3 iho*
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Ethylene Glycol Monobutyl Ether 111-76-2	TWA: 10 ppm TWA: 49 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 *	TWA: 10 ppm TWA: 49 mg/m^3 H*	TWA: 10 ppm TWA: 49 mg/m^3 Peak: 20 ppm Peak: 98 mg/m^3 *	TWA: 25 ppm TWA: 120 mg/m^3 *	TWA: 98 mg/m^3 STEL: 246 mg/m^3 b*
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Ethylene Glycol Monobutyl Ether 111-76-2	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 Sk*	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 cute*	TWA: 20 ppm TWA: 97 mg/m^3	TWA: 20 ppm TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 Ada*	TWA: 10 ppm TWA: 50 mg/m^3 STEL: 20 ppm STEL: 100 mg/m^3 O*
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Ethylene Glycol Monobutyl Ether 111-76-2	STEL: 50 ppm STEL: 246 mg/m^3 TWA: 20 ppm TWA: 98 mg/m^3 Peau*	STEL: 50 ppm STEL: 246 mg/m^3 TWA: 20 ppm TWA: 98 mg/m^3 skin*	TWA: 100 mg/m^3 STEL: 246 mg/m^3 H*	TWA: 10 ppm TWA: 50 mg/m^3 STEL: 20 ppm STEL: 75 mg/m^3 H*	STEL: 200 mg/m^3 TWA: 98 mg/m^3 skóra*
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Ethylene Glycol	TWA: 20 ppm	TWA: 20 ppm	TWA: 20 ppm	TWA: 20 ppm	TWA: 20 ppm

Monobutyl Ether 111-76-2	TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 Cutânea*	TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 P*	TWA: 98 mg/m^3 K* Ceiling: 246 mg/m^3	TWA: 98 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 K*	TWA: 98 mg/m^3 STEL: 50 ppm STEL: 245 mg/m^3 vía dérmica*

Chemical name	Sweden	Switzerland	United Kingdom
Ethylene Glycol Monobutyl Ether 111-76-2	NGV: 10 ppm NGV: 50 mg/m^3 Bindande KGV: 50 ppm Bindande KGV: 246 mg/m^3 H*	TWA: 10 ppm TWA: 49 mg/m^3 STEL: 20 ppm STEL: 98 mg/m^3 H*	TWA: 25 ppm TWA: 123 mg/m^3 STEL: 50 ppm STEL: 246 mg/m^3 Sk*

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Ethylene Glycol Monobutyl Ether 111-76-2	-	-	-	-	200 mg/g Creatinine (urine - Butoxyacetic acid end of shift at end of workweek) 0.17 mmol/mmol Creatinine (urine - Butoxyacetic acid end of shift at end of workweek)

Chemical name	Denmark	Finland	France	Germany DFG	Germany TRGS
Ethylene Glycol Monobutyl Ether 111-76-2	-	-	-	150 mg/g Creatinine (urine - Butoxyacetic acid (after hydrolysis) for long-term exposures: at the end of the shift after several shifts) 150 mg/g Creatinine (urine - Butoxyacetic acid (after hydrolysis) end of shift) 150 mg/g Creatinine - BAT (for long-term exposures: at the end of the shift after several shifts) urine 150 mg/g Creatinine - BAT (end of exposure or end of shift) urine	150 mg/g Creatinine (urine - Butoxyacetic acid (after hydrolysis) for long-term exposures: at the end of the shift after several shifts) 150 mg/g Creatinine (urine - Butoxyacetic acid (after hydrolysis) end of shift)

Chemical name	Hungary	Ireland	Italy MDLPS	Italy AIDII
Ethylene Glycol Monobutyl Ether 111-76-2	-	200 mg/g Creatinine (urine - end of shift)	-	200 mg/g Creatinine - urine (Butoxyacetic acid (with hydrolysis)) - end of shift

Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Ethylene Glycol Monobutyl Ether	150 mg/g Creatinine - urine (Butoxyacetic acid	200 mg/g Creatinine (urine - Butoxyacetic acid	150 mg/g creatinine (urine - 2-Butoxyacetic	240 mmol/mol creatinine - urine (Butoxyacetic acid)

111-76-2	(after hydrolysis)) - at the end of the work shift; for long-term exposure: at the end of the work shift after several consecutive workdays	(with hydrolysis) end of shift)	acid (after hydrolysis) end of shift, and after several shifts (for long-term exposures))	- post shift

Derived No Effect Level (DNEL) - Workers No information available

Derived No Effect Level (DNEL) - General Public No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls No information available.

Personal Protective Equipment

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

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear, pale pink or pale blue liquid
Color	Clear, pale pink or pale blue
Odor	Mild citrus.
Odor Threshold	No information available

Property	**Values**	**Remarks • Method**
Melting point / freezing point	No data available	
Initial boiling point and boiling range	100 - 212 °C	
Flammability (Solid, Gas)	Liquid-Not applicable	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	
Autoignition temperature	No data available	
Decomposition temperature		
pH	7	
pH (as aqueous solution)	No data available	
Kinematic viscosity	No data available	
Property	**Values**	**Remarks • Method**
Dynamic Viscosity	No data available	
Water solubility	Soluble in water	

Solubility(ies)	No data available
Partition Coefficient	No data available
Vapor Pressure	No data available
Relative Density	1.010
Bulk Density	No data available
Liquid Density	No data available
Vapor Density	1.3
Particle characteristics	
Particle Size	No information available
Particle Size Distribution	No information available

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion Data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information No acute toxicity information is available for this product

Skin contact Causes mild skin irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral) 23,529.40 mg/kg
ATEmix (dermal) 21,568.60 mg/kg
ATEmix (inhalation-vapor) 58.80 mg/l
ATEmix (inhalation-dust/mist) 9.82 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene Glycol Monobutyl Ether	= 470 mg/kg (Rat)	= 435 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h = 486 ppm (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes mild skin irritation.

Serious eye damage/eye irritation Not classified.

Respiratory or skin sensitization Not classified.

Germ cell mutagenicity Not classified.

Carcinogenicity Not classified.

Reproductive toxicity Not classified.

STOT - single exposure Not classified.

STOT - repeated exposure Not classified.

Aspiration hazard Not classified.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other Adverse Effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethylene Glycol Monobutyl Ether	-	LC50: =1490mg/L (96h, Lepomis macrochirus) LC50: =2950mg/L (96h, Lepomis macrochirus)	-	EC50: >1000mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence/Degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Ethylene Glycol Monobutyl Ether	0.81

12.4. Mobility in soil

Mobility in Soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Ethylene Glycol Monobutyl Ether	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging Do not reuse empty containers.

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Ethylene Glycol Monobutyl Ether 111-76-2	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.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Ethylene Glycol Monobutyl Ether - 111-76-2	75.	-

Persistent Organic Pollutants

Not applicable

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

Not applicable

International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/ELINCS	PICCS	ENCS	IECSC	AIIC	KECL
Ethylene Glycol Monobutyl Ether 111-76-2 (5-15)	X	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H331 - Toxic if inhaled

Legend
SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine’s PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
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