

SAFETY DATA SHEET

LCD CLEANER

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name LCD CLEANER

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

Identified uses Cleaning agent.

Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier GARDX INTERNATIONAL LTD
UNIT 7 CLOVELLY BUSINESS PARK
CLOVELLY ROAD
SOUTHBOURNE, EMSWORTH
HANTS
PO10 8PE
+44 (0)1243 376426
product@gardx.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330 (24 hrs).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Sens. 1 - H317

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements H317 May cause an allergic skin reaction.

Precautionary statements P102 Keep out of reach of children.
P101 If medical advice is needed, have product container or label at hand.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P501 Dispose of contents/ container in accordance with national regulations.

Contains 2-METHYL-2H-ISOTHIAZOL-3-ONE

Detergent labelling < 5% anionic surfactants, < 5% cationic surfactants, < 5% non-ionic surfactants, Contains N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine, METHYLISOTHIAZOLINONE, 1,2-BENZOISOTHIAZOL-3(2H)-ONE

2.3. Other hazards

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This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ISO-BUTANOL			<1%
CAS number: 78-83-1	EC number: 201-148-0	REACH registration number: 01-2119484609-23-XXXX	

Classification

Flam. Liq. 3 - H226
 Skin Irrit. 2 - H315
 Eye Dam. 1 - H318
 STOT SE 3 - H335, H336

2-METHYL-2H-ISOTHIAZOL-3-ONE

<1%

CAS number: 2682-20-4 EC number: 220-239-6
 M factor (Acute) = 10 M factor (Chronic) = 1

Classification

Acute Tox. 3 - H301
 Acute Tox. 3 - H311
 Acute Tox. 2 - H330
 Skin Corr. 1B - H314
 Eye Dam. 1 - H318
 Skin Sens. 1A - H317
 STOT SE 3 - H335
 Aquatic Acute 1 - H400
 Aquatic Chronic 1 - H410

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

General information	Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Rinse with water.
Eye contact	Rinse cautiously with water for several minutes. Remove any contact lenses and open eyelids wide apart. Continue to rinse. Get medical attention if symptoms are severe or persist after washing.

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

Inhalation	Coughing, chest tightness, feeling of chest pressure.
Ingestion	Gastrointestinal symptoms, including upset stomach.
Skin contact	Prolonged and frequent contact may cause redness and irritation.

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Eye contact May cause discomfort.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters

Protective actions during firefighting No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. Avoid contact with skin, eyes and clothing. Take care as floors and other surfaces may become slippery. Do not handle broken packages without protective equipment. Avoid contact with contaminated tools and objects. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Contain and absorb spillage with sand, earth or other non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective gloves. Avoid contact with skin, eyes and clothing. Avoid breathing spray. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store at temperatures between 4°C and 40°C.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

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8.1. Control parameters

Occupational exposure limits

ISO-BUTANOL

Long-term exposure limit (8-hour TWA): WEL 50 ppm 154 mg/m³

Short-term exposure limit (15-minute): WEL 75 ppm 231 mg/m³

WEL = Workplace Exposure Limit

DIPROPYLENE GLYCOL n-BUTYL ETHER (CAS: 29911-28-2)

DNEL	Professional - Dermal; Long term systemic effects: 3 mg/kg/day Professional - Inhalation; Long term systemic effects: 10 mg/m ³ Consumer - Dermal; Long term systemic effects: 1.1 mg/kg/day Consumer - Inhalation; Long term systemic effects: 1.2 mg/m ³ Consumer - Oral; Long term systemic effects: 7.5 mg/kg/day
PNEC	- Fresh water; 0.519 mg/l - marine water; .0519 mg/l - Sediment (Freshwater); 2.96 mg/kg - Soil; 0.287 mg/kg - STP; 100 mg/l - Sediment (Marinewater); 0.296 mg/kg - Intermittent release; 5.19 mg/l

SODIUM LAUROYL SARCOSINATE (CAS: 137-16-6)

DNEL	Consumer - Dermal; : 0.34 mg/kg/day Industry - Dermal; : 3.43 mg/kg/day Professional - Dermal; : 3.43 mg/kg/day Consumer - Inhalation; : 0.01 mg/m ³ Industry - Inhalation; : 0.1 mg/m ³ Professional - Inhalation; : 0.5 mg/m ³
PNEC	Consumer - Fresh water; 0.0297 mg/l Consumer - marine water; 0.003 mg/l Consumer - Soil; 0.012 mg/kg Consumer - STP; >10 mg/l Consumer - Sediment (Freshwater); 0.034 mg/kg Consumer - Sediment (Marinewater); 0.0034 mg/kg

C13-15 ALCOHOL ETHOXYLATE 11EO (CAS: 157627-86-6)

DNEL	General population - Oral; Long term systemic effects: 25 mg/kg/day General population - Dermal; Long term systemic effects: 1250 mg/kg/day General population - Inhalation; Long term systemic effects: 87 mg/m ³ Workers - Dermal; Long term systemic effects: 2080 mg/kg/day
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ISO-BUTANOL (CAS: 78-83-1)

DNEL	Industry - Inhalation; Long term : 310 mg/m ³ Consumer - Inhalation; Long term : 55 mg/m ³ Consumer - Oral; Long term : 25 mg/kg/day
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PNEC

- Fresh water; 0.4
- marine water; 0.04 mg/l
- Sediment; 1.52 mg/l
- Soil; 0.0699 mg/kg
- STP; 10 mg/kg
- Intermittent release; 11 mg/l
- Sediment (Freshwater); 1.52 mg/kg
- Sediment (Marinewater); 0.152 mg/kg

8.2. Exposure controls

Protective equipment



Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. When used with mixtures, the protection time of gloves cannot be accurately estimated. Wear protective gloves made of the following material: Neoprene. Nitrile rubber. Rubber (natural, latex). Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended. Protective gloves should have a minimum thickness of 0.15 mm. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application.

Hygiene measures

Wash hands thoroughly after handling.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Light (or pale). Straw.
Odour	Mild.
pH	pH (concentrated solution): 7.0
Relative density	1.00 @ 25°C
Solubility(ies)	Soluble in water.

9.2. Other information

Other information	Not determined.
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SECTION 10: Stability and reactivity

10.1. Reactivity

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Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 1,100.0

Inhalation Coughing, chest tightness, feeling of chest pressure.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact May cause discomfort.

Toxicological information on ingredients.

DIPROPYLENE GLYCOL n-BUTYL ETHER

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,700.0

Species Rat

ATE oral (mg/kg) 3,700.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,001.0

Species Rat

SODIUM LAUROYL SARCOSINATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,001.0

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Species	Rat
ATE oral (mg/kg)	5,001.0

C13-15 ALCOHOL ETHOXYLATE 11EO**Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg)	2,000.0
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Species	Rat
ATE oral (mg/kg)	2,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)	2,001.0
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Species	Rat
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ISO-BUTANOL**Acute toxicity - oral**

Acute toxicity oral (LD₅₀ mg/kg)	2,830.0
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Species	Rat
ATE oral (mg/kg)	2,830.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)	2,460.0
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Species	Rabbit
ATE dermal (mg/kg)	2,460.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	24.6
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Species	Rat
ATE inhalation (dusts/mists mg/l)	24.6

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity**Acute aquatic toxicity**

Acute toxicity - fish Not determined.

Ecological information on ingredients.**DIPROPYLENE GLYCOL n-BUTYL ETHER****Acute aquatic toxicity**

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Acute toxicity - fish LC50, 96 hours: 841 mg/l, Poecilia reticulata (Guppy)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 1000 mg/l, Daphnia magna

SODIUM LAUROYL SARCOSINATE

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 107 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 29.7 mg/l, Daphnia magna

C13-15 ALCOHOL ETHOXYLATE 11EO

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 1 - 10 mg/l,

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1 - 10 mg/l, Daphnia magna

ISO-BUTANOL

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 1430 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1100 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 1799 mg/l, Selenastrum capricornutum

Acute toxicity - microorganisms NOEC, >: > 1000 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 20 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility Soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Disposal methods Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Special Provisions note

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Commission Regulation (EU) No 453/2010 of 20 May 2010.
Commission Regulation (EU) No 2015/830 of 28 May 2015.
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 (as amended).
Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (as amended).

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet	<p>ATE: Acute Toxicity Estimate. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. GHS: Globally Harmonized System. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. LC₅₀: Lethal Concentration to 50 % of a test population. LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose). PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. vPvB: Very Persistent and Very Bioaccumulative. EC₅₀: 50% of maximal Effective Concentration. UN: United Nations.</p>
Classification abbreviations and acronyms	<p>Flam. Liq. = Flammable liquid Skin Irrit. = Skin irritation Eye Dam. = Serious eye damage STOT SE = Specific target organ toxicity-single exposure</p>
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	19/03/2019
Revision	1.0
SDS number	29715
Hazard statements in full	<p>H226 Flammable liquid and vapour. H301 Toxic if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.</p>

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.