

**Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : Clinil

UFI : C3JN-JKHG-G00M-D453

Product code : 100350E

Use of the Substance/Mixture : Glass Cleaner

Substance type: : Mixture

**For professional users only.**

Product dilution information : No dilution information provided.

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

Identified uses : Glass cleaner. Spray and wipe manual process

Recommended restrictions on use : Reserved for industrial and professional use.

**1.3 Details of the supplier of the safety data sheet**

Company : Ecolab Limited  
Forest Park  
Mullingar Industrial Estate, Mullingar Co. Westmeath Ireland +353  
1 276 3500  
infoireland@ecolab.com

Ecolab Ltd.  
PO Box 11; Winnington Avenue  
Northwich, Cheshire, United Kingdom CW8 4DX  
+353 (0)1 276 3500  
ccs@ecolab.com

**1.4 Emergency telephone number**

Poison Information Centre telephone number : Poisons Information: For information or to report a poisoning incident contact The National Poisons Information Centre (01 8092166)

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Version : 2.3

**Section: 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

**Classification (REGULATION (EC) No 1272/2008)**

# SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

**Clinil**

Not a hazardous substance or mixture.

## 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

### Additional Labelling:

Special labelling of certain mixtures : Safety data sheet available on request.

## 2.3 Other hazards

None known.

## Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration : [%]
2-butoxyethanol	111-76-2 203-905-0 01-2119475108-36	Acute toxicity Category 4; H302 Acute toxicity Category 3; H331 Skin irritation Category 2; H315 Eye irritation Category 2; H319	>= 5 - < 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

## Section: 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

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

See Section 11 for more detailed information on health effects and symptoms.

### 4.3 Indication of immediate medical attention and special treatment needed

Treatment : No specific measures identified.

## Section: 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Clinil**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : None known.

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting : Fire Hazard  
Keep away from heat and sources of ignition.  
Flash back possible over considerable distance.

Hazardous combustion products : Depending on combustion properties, decomposition products may include following materials:  
Carbon oxides

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Use personal protective equipment.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Section: 6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel : Remove all sources of ignition. Refer to protective measures listed in sections 7 and 8.

Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

**6.2 Environmental precautions**

Environmental precautions : No special environmental precautions required.

**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

**6.4 Reference to other sections**

See Section 1 for emergency contact information.  
For personal protection see section 8.  
See Section 13 for additional waste treatment information.

**Section: 7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

**SAFETY DATA SHEET** according to Regulation (EC) No. 1907/2006**Clinil**

Advice on safe handling : Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

Hygiene measures : Wash hands before breaks and immediately after handling the product.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storage areas and containers : Keep away from heat and sources of ignition. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : -5 °C to 40 °C

**7.3 Specific end uses**

Specific use(s) : Glass cleaner. Spray and wipe manual process

**Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2-butoxyethanol	111-76-2	OELV - 8 hrs (TWA)	20 ppm 98 mg/m3	IR_OEL
Further information	Sk	Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body		
		OELV - 15 min (STEL)	50 ppm 246 mg/m3	IR_OEL
Further information	Sk	Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body		
Isopropyl Alcohol	67-63-0	OELV - 8 hrs (TWA)	200 ppm	IR_OEL
Further information	Sk	Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body		
		OELV - 15 min (STEL)	400 ppm	IR_OEL
Further information	Sk	Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body		
ammonium hydroxide	1336-21-6	OELV - 8 hrs (TWA)	20 ppm 14 mg/m3	IR_OEL
Further information	IOEL V	Indicative Occupational Exposure Limit Value		
		OELV - 15 min (STEL)	50 ppm 36 mg/m3	IR_OEL
Further information	IOEL V	Indicative Occupational Exposure Limit Value		

**DNEL**

Isopropyl Alcohol	:	End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects 888 mg/kg  End Use: Workers
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	<p>Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 500 mg/m<sup>3</sup></p> <p>End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects 319 mg/kg</p> <p>End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 89 mg/m<sup>3</sup></p> <p>End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects 26 mg/kg</p>
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**PNEC**

Isopropyl Alcohol	<p>: Fresh water Value: 140.9 mg/l</p> <p>Marine water Value: 140.9 mg/l</p> <p>Intermittent use/release Value: 140.9 mg/l</p> <p>Fresh water Value: 552 mg/kg</p> <p>Marine sediment Value: 552 mg/kg</p> <p>Soil Value: 28 mg/kg</p> <p>Sewage treatment plant Value: 2251 mg/l</p> <p>Oral Value: 160 mg/kg</p>
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**8.2 Exposure controls**

**Appropriate engineering controls**

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures**

Hygiene measures : Wash hands before breaks and immediately after handling the product.

**Clinil**

- Eye/face protection (EN 166) : No special protective equipment required.
- Hand protection (EN 374) : No special protective equipment required.
- Skin and body protection (EN 14605) : No special protective equipment required.
- Respiratory protection (EN 143, 14387) : None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

**Environmental exposure controls**

- General advice : Consider the provision of containment around storage vessels.

**Section: 9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

- Physical state : liquid
- Colour : colourless
- Odour : ammoniacal
- pH : 10.3 - 11.3, 100 %
- Particle characteristics
- Assessment : not applicable
  - Particle size : not applicable
  - Particle Size Distribution : not applicable
  - Dustiness : not applicable
  - Specific surface area : not applicable
  - Surface charge/Zeta potential : not applicable
  - Shape : not applicable
  - Crystallinity : not applicable
  - Surface treatment /Coatings : not applicable
- Flash point : 78 °C closed cup
- Odour Threshold : Not applicable and/or not determined for the mixture
- Melting point/freezing point : Not applicable and/or not determined for the mixture
- Boiling point, initial boiling point and boiling range : Not applicable and/or not determined for the mixture
- Evaporation rate : Not applicable and/or not determined for the mixture
- Flammability : Not applicable and/or not determined for the mixture
- Upper explosion limit : Not applicable and/or not determined for the mixture

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Lower explosion limit	: Not applicable and/or not determined for the mixture
Vapour pressure	: Not applicable and/or not determined for the mixture
Relative vapour density	: Not applicable and/or not determined for the mixture
Density and / or relative density	: 0.8 - 1.1
Water solubility	: soluble
Solubility in other solvents	: Not applicable and/or not determined for the mixture
Partition coefficient: n-octanol/water (log value)	: Not applicable and/or not determined for the mixture
Auto-ignition temperature	: Not applicable and/or not determined for the mixture
Thermal decomposition	: Not applicable and/or not determined for the mixture
Viscosity, kinematic	: Not applicable and/or not determined for the mixture
Explosive properties	: Not applicable and/or not determined for the mixture
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

**9.2 Other information**

Not applicable and/or not determined for the mixture

**Section: 10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**10.4 Conditions to avoid**

Heat, flames and sparks.

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products**

Depending on combustion properties, decomposition products may include following materials:  
Carbon oxides

**Section: 11. TOXICOLOGICAL INFORMATION**

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

Information on likely routes of : Inhalation, Eye contact, Skin contact

**Clinil**

exposure

**Product**

Acute oral toxicity	: Acute toxicity estimate : > 2,000 mg/kg
Acute inhalation toxicity	: 4 h Acute toxicity estimate : > 20 mg/l Test atmosphere: vapour
Acute dermal toxicity	: There is no data available for this product.
Skin corrosion/irritation	: There is no data available for this product.
Serious eye damage/eye irritation	: There is no data available for this product.
Respiratory or skin sensitization	: There is no data available for this product.
Carcinogenicity	: There is no data available for this product.
Reproductive effects	: There is no data available for this product.
Germ cell mutagenicity	: There is no data available for this product.
Teratogenicity	: There is no data available for this product.
STOT - single exposure	: There is no data available for this product.
STOT - repeated exposure	: There is no data available for this product.
Aspiration toxicity	: There is no data available for this product.

**Components**

Acute oral toxicity	: 2-butoxyethanol LD50 rat: 1,500 mg/kg
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**Potential Health Effects**

Eyes	: Health injuries are not known or expected under normal use.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

**Experience with human exposure**

Eye contact	: No symptoms known or expected.
Skin contact	: No symptoms known or expected.
Ingestion	: No symptoms known or expected.
Inhalation	: No symptoms known or expected.

**11.2 Information on other hazards**



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**Further information** : no data available

**Section: 12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

**Environmental Effects** : This product has no known ecotoxicological effects.

**Product**

**Toxicity to fish** : no data available

**Toxicity to daphnia and other aquatic invertebrates** : no data available

**Toxicity to algae** : no data available

**Components**

**Toxicity to fish** : 2-butoxyethanol  
96 h LC50 Fish: > 100 mg/l

**Components**

**Toxicity to algae** : 2-butoxyethanol  
72 h EC50 Aquatic Plant: 911 mg/l

**12.2 Persistence and degradability**

**Product**

no data available

**Components**

**Biodegradability** : 2-butoxyethanol  
Result: Readily biodegradable.

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

**Product**

**Assessment** : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Endocrine disrupting properties**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

**Clinil****12.7 Other adverse effects**

no data available

**Section: 13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**13.1 Waste treatment methods**

- |                                   |   |
|-----------------------------------|---|
| Product                           | : Diluted product can be flushed to sanitary sewer if regulations permit.   |
| Contaminated packaging            | : Dispose of in accordance with local, state, and federal regulations.  |
| Guidance for Waste Code selection | : Organic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC) and local regulations. |

**Section: 14. TRANSPORT INFORMATION**

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

**Land transport (ADR/ADN/RID)**

- |                                   |                       |
|-----------------------------------|-----------------------|
| 14.1 UN number or ID number       | : Not dangerous goods |
| 14.2 UN proper shipping name      | : Not dangerous goods |
| 14.3 Transport hazard class(es)   | : Not dangerous goods |
| 14.4 Packing group                | : Not dangerous goods |
| 14.5 Environmental hazards        | : Not dangerous goods |
| 14.6 Special precautions for user | : Not dangerous goods |

**Air transport (IATA)**

- |                                   |                       |
|-----------------------------------|-----------------------|
| 14.1 UN number or ID number       | : Not dangerous goods |
| 14.2 UN proper shipping name      | : Not dangerous goods |
| 14.3 Transport hazard class(es)   | : Not dangerous goods |
| 14.4 Packing group                | : Not dangerous goods |
| 14.5 Environmental hazards        | : Not dangerous goods |
| 14.6 Special precautions for user | : Not dangerous goods |

**Sea transport (IMDG/IMO)**

**Clinil**

14.1 UN number or ID : Not dangerous goods  
number  
14.2 UN proper shipping : Not dangerous goods  
name  
14.3 Transport hazard : Not dangerous goods  
class(es)  
14.4 Packing group : Not dangerous goods  
14.5 Environmental hazards : Not dangerous goods  
14.6 Special precautions for : Not dangerous goods  
user  
14.7 Maritime transport in : Not dangerous goods  
bulk according to IMO  
instruments

**Section: 15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso III: Directive : Not applicable.  
2012/18/EU of the European  
Parliament and of the Council  
on the control of major-  
accident hazards involving  
dangerous substances.

Candidate List of Substances : Not applicable.  
of Very High Concern for  
Authorisation

**National Regulations**

**Take note of Dir 94/33/EC on the protection of young people at work.**

Other regulations : Safety, Health and Welfare at Work Act, 2005  
European Communities (Classification, Packaging, Labelling and  
Notification of Dangerous Preparations) Regulations 1995. (S.I.  
272 of 1995) as amended

**15.2 Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out on the product.

**Section: 16. OTHER INFORMATION****Procedure used to derive the classification according to REGULATION (EC) No 1272/2008**

Classification	Justification
Not a hazardous substance or mixture.	Calculation method

**Full text of H-Statements**

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H331 Toxic if inhaled.

**Full text of other abbreviations**

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous

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Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECL - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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.

**Annex: Exposure Scenarios****Exposure Scenario: Glass cleaner. Spray and wipe manual process**

Life Cycle Stage : Widespread use by professional workers

Product category : **PC35** Washing and cleaning products (including solvent based products)

**SAFETY DATA SHEET** according to Regulation (EC) No. 1907/2006**Clinil****Contributing scenario controlling environmental exposure for:**

Environmental release category : **ERC8a** Wide dispersive indoor use of processing aids in open systems

Daily amount per site : 7.5 kg

Type of Sewage Treatment Plant : Municipal sewage treatment plant

**Contributing scenario controlling worker exposure for:**

Process category : **PROC10** Roller application or brushing

Exposure duration : 480 min

Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

**Contributing scenario controlling worker exposure for:**

Process category : **PROC11** Non industrial spraying

Exposure duration : 60 min

Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

**Exposure Scenario: Glass cleaner. Spray and wipe manual process**

Life Cycle Stage : Widespread use by professional workers

Product category : **PC35** Washing and cleaning products (including solvent based products)

**Contributing scenario controlling environmental exposure for:**

Environmental release category : **ERC8a** Wide dispersive indoor use of processing aids in open systems

Daily amount per site : 7.5 kg

Type of Sewage Treatment : Municipal sewage treatment plant

**Clinil**

Plant

**Contributing scenario controlling worker exposure for:**

Process category : **PROC10** Roller application or brushing

Exposure duration : 480 min

Operational conditions and  
risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

**Contributing scenario controlling worker exposure for:**

Process category : **PROC11** Non industrial spraying

Exposure duration : 60 min

Operational conditions and  
risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8