

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

Product form : Mixture  
 Product name : CITROL  
 Product code : 401  
 Type of product : Detergent  
 Product group : Mixture

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

Industrial/Professional use spec : Industrial  
 For professional use only  
 Use of the substance/mixture : Cleaning/washing agents and additives

**1.2.2. Uses advised against**

No additional information available

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

Clover Chemicals Ltd  
 Clover House  
 Macclesfield Road  
 SK23 7DQ Whaley Bridge - United Kingdom  
 T 01663 733114 - F 01663 733115  
[info@cloverchemicals.com](mailto:info@cloverchemicals.com) - [www.cloverchemicals.com](http://www.cloverchemicals.com)

**1.4. Emergency telephone number**

Country	Official advisory body	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

**SECTION 2: Hazards identification**
**2.1. Classification of the substance or mixture**
**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Skin Irrit. 2 H315  
 Eye Dam. 1 H318

Full text of hazard classes and H-statements : see section 16

**Adverse physicochemical, human health and environmental effects**

No additional information available

**2.2. Label elements**
**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS05

CLP Signal word

: Danger

Hazardous ingredients

: Sodium dodecylbenzenesulfonate; Alcohols, ethoxylated, sulfates, sodium salts; 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts

Hazard statements (CLP)

: H315 - Causes skin irritation.  
 H318 - Causes serious eye damage.

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Precautionary statements (CLP)	: P102 - Keep out of reach of children. P264 - Wash hands thoroughly after handling. P280 - Wear protective gloves, eye protection. P302+P352 - IF ON SKIN: Wash with plenty of water. P332+P313 - If skin irritation occurs: Get medical advice/attention. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention.
EUH-statements	: EUH208 - Contains 1,2-benzisothiazol-3(2H)-one (BIT). May produce an allergic reaction.

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium dodecylbenzenesulfonate	(CAS-no) 25155-30-0 (Einecs nr) 246-680-4 (EG annex nr) / (REACH-no) 01-2119565112-48	10 – 30	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318
Alcohols, ethoxylated, sulfates, sodium salts	(CAS-no) 68891-38-3 (Einecs nr) 500-234-8 (REACH-no) 01-2119488639-16	1 – 3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts	(CAS-no) 61789-40-0; 97862-59-4 (Einecs nr) 263-058-8 (REACH-no) 01-2119488533-30	1 – 3	Eye Dam. 1, H318 Aquatic Chronic 3, H412
1,2-benzisothiazol-3(2H)-one (BIT)	(CAS-no) 2634-33-5 (Einecs nr) 220-120-9 (EG annex nr) 613-088-00-6 (REACH-no) 01-2120761540-60	< 0.1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10)

### Specific concentration limits:

Name	Product identifier	Specific concentration limits
Alcohols, ethoxylated, sulfates, sodium salts	(CAS-no) 68891-38-3 (Einecs nr) 500-234-8 (REACH-no) 01-2119488639-16	( 5 ≤C < 10) Eye Irrit. 2, H319 ( 10 ≤C < 100) Eye Dam. 1, H318
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts	(CAS-no) 61789-40-0; 97862-59-4 (Einecs nr) 263-058-8 (REACH-no) 01-2119488533-30	( 4 <C ≤ 10) Eye Irrit. 2, H319 ( 10 <C ≤ 100) Eye Dam. 1, H318
1,2-benzisothiazol-3(2H)-one (BIT)	(CAS-no) 2634-33-5 (Einecs nr) 220-120-9 (EG annex nr) 613-088-00-6 (REACH-no) 01-2120761540-60	( 0.05 ≤C < 100) Skin Sens. 1, H317

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General advice	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
Inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
Skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
Eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Acute effects skin	: Causes skin irritation. Red skin.
Acute effects eyes	: Causes serious eye damage. Redness.

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Acute effects oral route : May cause irritation to the digestive tract.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Packaging materials : polyethylene. stainless steel.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses

#### Other information:

Do not eat, drink or smoke during use.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Physical state/form	: Liquid.
Colour	: light yellow.
Odour	: lemon. Citrus fruits.
Odour threshold	: No data available
pH	: 9 – 9.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point/range	: 0 °C
Freezing point	: No data available
Boiling point/Boiling range	: 100 °C
Flash point	: No data available
Autoignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.03
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 800 cP at 20 °C
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

VOC content	: 0 g/l
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

No additional information available

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### Alcohols, ethoxylated, sulfates, sodium salts (68891-38-3)

LD50 oral rat	> 4100 mg/kg OCDE 401
LD50 dermal rat	> 2000 mg/kg OCDE 402

#### 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts (61789-40-0; 97862-59-4)

LD50 oral rat	2335 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE CLP (oral)	2335 mg/kg

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### 1,2-benzisothiazol-3(2H)-one (BIT) (2634-33-5)

LD50 oral	490 mg/kg bodyweight
LD50 dermal rat	2000 mg/kg bodyweight
ATE CLP (oral)	670 mg/kg bodyweight
ATE CLP (dermal)	5000 mg/kg bodyweight

Skin corrosion/irritation	: Causes skin irritation. pH: 9 – 9.5
Serious eye damage/irritation	: Causes serious eye damage. pH: 9 – 9.5
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### Alcohols, ethoxylated, sulfates, sodium salts (68891-38-3)

LC50 fish 1	7.1 mg/l OECD 203
EC50 Daphnia 1	7.4 mg/l OECD 202 Daphnia sp.Acute Immobilization Test and Reproduction Test
EC50 72h algae (1)	27.7 mg/l
ErC50 (algae)	27.7 mg/l OECD 201 Alga, Growth Inhibition Test
NOEC chronic algae	0.95 mg/l OECD 201 Alga, Growth Inhibition Test

### 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts (61789-40-0; 97862-59-4)

LC50 fish 1	1.11 mg/l
EC50 Daphnia 1	1.9 mg/l
ErC50 (algae)	2.4 mg/l
NOEC (chronic)	0.135 mg/l

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### 1,2-benzisothiazol-3(2H)-one (BIT) (2634-33-5)

LC50 fish 1	1.3 mg/l
EC50 Daphnia 1	2.94 mg/l
ErC50 (algae)	0.084 mg/l
NOEC chronic fish	0.74 mg/l
NOEC chronic crustacea	0.7 mg/l
NOEC chronic algae	0.043 mg/l

### 12.2. Persistence and degradability

#### CITROL

Persistence and degradability	Biodegradable. The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
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### Alcohols, ethoxylated, sulfates, sodium salts (68891-38-3)

Persistence and degradability	Biodegradable.
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### 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts (61789-40-0; 97862-59-4)

Biodegradation	91.6 % OECD 301 B
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### 12.3. Bioaccumulative potential

#### CITROL

Bioaccumulative potential	No bioaccumulation.
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### 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts (61789-40-0; 97862-59-4)

Bioconcentration factor (BCF REACH)	71
Partition coefficient n-octanol/water (Log Kow)	4.2

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

#### CITROL

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### Component

Alcohols, ethoxylated, sulfates, sodium salts (68891-38-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
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### 12.6. Other adverse effects

Additional information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Waste / unused products : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA
<b>14.1. UN number</b>		
Not regulated	Not regulated	Not regulated

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### 14.2. UN proper shipping name

Not regulated

Not regulated

Not regulated

### 14.3. Transport hazard class(es)

Not regulated

Not regulated

Not regulated

### 14.4. Packing group

Not regulated

Not regulated

Not regulated

### 14.5. Environmental hazards

Not regulated

Not regulated

Not regulated

No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

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

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content : 0 g/l

Allergenic fragrances > 0,01%:

D-LIMONENE  
BENZYL SALICYLATE  
LINALOOL  
CITRAL  
AMYL CINNAMAL

Detergent Regulation (648/2004/EC): Labelling of contents:

Component	%
anionic surfactants	15-30%
amphoteric surfactants	<5%
BENZISOTHIAZOLINONE	
perfumes	
BENZYL SALICYLATE	
LINALOOL	

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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### SECTION 16: Other information

Data sources : 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.

Other information : None.

#### Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one (BIT). May produce an allergic reaction.

#### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.