

**Section 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

**Product name:** CLARIFI

**Product code:** 369

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

**Use of substance / mixture:** PC35: Washing and cleaning products (including solvent based products).

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

**Company name:** Clover Chemicals Ltd

Clover House

Macclesfield Road

Whaley Bridge, High Peak

Derbyshire

SK23 7DQ

UK

**Tel:** +44 (0) 1663 733114

**Fax:** +44 (0) 1663 733115

**Email:** technical@cloverchemicals.com

**1.4. Emergency telephone number**

**Emergency tel:** NHS Direct 08454647

NHS24 0845242424

ROI 018092166

(office hours only)

**Section 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification under CLP:** Skin Corr. 1A: H314; Aquatic Acute 1: H400; -: EUH031

**Most important adverse effects:** Contact with acids liberates toxic gas. Causes severe skin burns and eye damage. Very toxic to aquatic life.

**2.2. Label elements**

**Label elements:**

**Hazard statements:** EUH031: Contact with acids liberates toxic gas.

H314: Causes severe skin burns and eye damage.

H400: Very toxic to aquatic life.

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**Signal words:** Danger

**Hazard pictograms:** GHS05: Corrosion

GHS09: Environmental



**Precautionary statements:** P102: Keep out of reach of children.

P282: Wear eye protection.

P280: Wear protective gloves.

P264: Wash hands thoroughly after handling.

P273: Avoid release to the environment.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313: If eye irritation persists: Get medical attention.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P332+313: If skin irritation occurs: Get medical attention.

P362: Take off contaminated clothing.

P391: Collect spillage.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous ingredients:

SODIUM HYDROXIDE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
215-185-5	1310-73-2	-	Skin Corr. 1A: H314	1-10%

SODIUM HYPOCHLORITE SOLUTION CL ACTIVE

231-668-3	7681-52-9	-	Skin Corr. 1B: H314; Aquatic Acute 1: H400; -: EUH031	1-10%
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## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

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**Ingestion:** Wash out mouth with water. If conscious, give half a litre of water to drink immediately.  
Transfer to hospital as soon as possible.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

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

**Skin contact:** Severe burns may occur.

**Eye contact:** Corneal burns may occur. May cause permanent damage.

**Ingestion:** Corrosive burns may appear around the lips. Nausea and stomach pain may occur.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** Eye bathing equipment should be available on the premises.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Water.

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

**Exposure hazards:** Corrosive.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

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

**Personal precautions:** Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers.

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

**Clean-up procedures:** Avoid all incompatible materials in clean-up procedure - see section 10 of SDS. Transfer to a suitable container.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

[cont...]

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

**Storage conditions:** Store in a cool, well ventilated area.

**Suitable packaging:** Polyethylene.

## 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

**SODIUM HYDROXIDE**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	2 mg/m <sup>3</sup>	-	-

**SODIUM HYPOCHLORITE SOLUTION...100% CL ACTIVE**

UK	1.5mg/m <sup>3</sup>	-	-	-
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### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Hand protection:** Gloves (alkali-resistant). Breakthrough time of the glove material > 1 hour.

**Eye protection:** Safety glasses with side-shields.

**Skin protection:** Alkali resistant protective clothing.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Colour:** Pale yellow

**Odour:** Characteristic odour

**Evaporation rate:** Moderate

**Oxidising:** Not applicable.

**Solubility in water:** Soluble

**Viscosity:** Non-viscous

**Boiling point/range°C:** 100

**Melting point/range°C:** 0

**Flammability limits %: lower:** Not applicable.

**upper:** Not applicable.

**Flash point°C:** Not applicable.

**Part.coeff. n-octanol/water:** Not applicable.

**Autoflammability°C:** Not applicable.

**Vapour pressure:** Not applicable.

**Relative density:** 1.08

**pH:** 13.5

**VOC g/l:** 0

[cont...]

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## 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

### 10.5. Incompatible materials

**Materials to avoid:** Acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** Contact with acids liberates toxic gas. In combustion emits toxic fumes.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Hazardous ingredients:

#### SODIUM HYDROXIDE

IPR	MUS	LD50	40	mg/kg
ORL	RBT	LDLO	500	mg/kg

#### SODIUM HYPOCHLORITE SOLUTION...100% CL ACTIVE

ORL	RAT	LD50	750	mg/kg
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#### Relevant hazards for substance:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** Severe burns may occur.

**Eye contact:** Corneal burns may occur. May cause permanent damage.

**Ingestion:** Corrosive burns may appear around the lips. Nausea and stomach pain may occur.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

[cont...]

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## Section 12: Ecological information

### 12.1. Toxicity

**Hazardous ingredients:**

**SODIUM HYPOCHLORITE SOLUTION...100% CL ACTIVE**

-	LC100	1	mg/l
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### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

### 12.4. Mobility in soil

**Mobility:** Soluble in water.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal of packaging:** Dispose of as normal industrial waste.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN1719

### 14.2. UN proper shipping name

**Shipping name:** CAUSTIC ALKALI LIQUID, N.O.S.  
(SODIUM HYDROXIDE 5 %)

### 14.3. Transport hazard class(es)

**Transport class:** 8

### 14.4. Packing group

**Packing group:** II

### 14.5. Environmental hazards

**Environmentally hazardous:** Yes

**Marine pollutant:** Yes

[cont...]

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## 14.6. Special precautions for user

**Special precautions:** No special precautions.

**Tunnel code:** E

**Transport category:** 2

## Section 15: Regulatory information

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

### 15.2. Chemical Safety Assessment

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** EUH031: Contact with acids liberates toxic gas.

H314: Causes severe skin burns and eye damage.

H400: Very toxic to aquatic life.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.