

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

**1.1. Product identifier**

**Product name:** REMOVE

**Product code:** 102

**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 111

NHS Direct Wales 08454647

ROI 01 809 2166

**Section 2: Hazards identification**

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

**Classification under CLP:** Skin Corr. 1A: H314; Aquatic Chronic 3: H412; -: EUH208

**Most important adverse effects:** Contains limonene ( citrus dulcis ). May produce an allergic reaction. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

**Label elements:**

**Hazard statements:** EUH208: Contains limonene ( citrus dulcis ). May produce an allergic reaction.

H314: Causes severe skin burns and eye damage.

H412: Harmful to aquatic life with long lasting effects.

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**Hazard pictograms:** GHS05: Corrosion



**Signal words:** Danger

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

P262: Do not get in eyes, on skin, or on clothing.

P280: Wear protective gloves.

P282: Wear eye protection.

P264: Wash hands thoroughly after handling.

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.

P333+313: If skin irritation or rash occurs: Get medical attention.

P405: Store locked up.

## 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:

2-BUTOXYETHANOL - REACH registered number(s): 01-2119475108-36-XXXX

EINECS	CAS	PBT / WEL	CLP Classification	Percent
203-905-0	111-76-2	-	Acute Tox. 4: H332; Acute Tox. 4: H312; Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315	1-10%

SODIUM HYDROXIDE

215-185-5	1310-73-2	-	Skin Corr. 1A: H314	1-10%
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B-ALANINE,N-COCO ALKYL DERIVATIVES, SODIUM SALTS

271-795-1	68608-68-4	-	Eye Irrit. 2: H319	1-10%
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C9-11 ALCOHOL ETHOXYLATE

-	68439-46-3	-	Eye Dam. 1: H318; Acute Tox. 4: H302	1-10%
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## POTASSIUM HYDROXIDE

215-181-3	1310-58-3	-	Acute Tox. 4: H302; Skin Corr. 1A: H314	<1%
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## LIMONENE ( CITRUS DULCIS )

232-433-8	8028-48-6	-	Flam. Liq. 3: H226; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Irrit. 2: H315; Skin Sens. 1: H317; Asp. Tox. 1: H304	<1%
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## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

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

**Ingestion:** Wash out mouth with water. Do not induce vomiting. 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. Transfer to hospital as soon as possible.

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**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:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

### 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.

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## Section 6: Accidental release measures

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

**Personal precautions:** Mark out the contaminated area with signs and prevent access to unauthorised personnel.  
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. Contain the spillage using bunding.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 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

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.  
Avoid the formation or spread of mists in the air.

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

**Storage conditions:** Keep container tightly closed.

**Suitable packaging:** Stainless steel. 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:**

**2-BUTOXYETHANOL**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	25 ppm	50 ppm	-	-

**SODIUM HYDROXIDE**

UK	-	2 mg/m <sup>3</sup>	-	-
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## POTASSIUM HYDROXIDE

UK	-	2 mg/m <sup>3</sup>	-	-
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### DNEL/PNEC Values

DNEL / PNEC No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Rubber gloves. Gloves (alkali-resistant).

**Eye protection:** Tightly fitting safety goggles. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Colour:** Red

**Odour:** Characteristic odour

**Evaporation rate:** Moderate

**Oxidising:** Non-oxidising (by EC criteria)

**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:** 1.073

**pH:** 13.1

**VOC g/l:** 36.5

### 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

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.

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## 10.4. Conditions to avoid

## 10.5. Incompatible materials

## 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Hazardous ingredients:

##### 2-BUTOXYETHANOL

IVN	RAT	LD50	307	mg/kg
ORL	MUS	LD50	1230	mg/kg
ORL	RAT	LD50	470	mg/kg

##### SODIUM HYDROXIDE

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

##### B-ALANINE,N-COCO ALKYL DERIVATIVES, SODIUM SALTS

ORL	-	LD50	>5000	mg/kg
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##### POTASSIUM HYDROXIDE

ORL	RAT	LD50	273	mg/kg
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#### Relevant hazards for product:

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

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

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

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## Section 12: Ecological information

### 12.1. Toxicity

**Hazardous ingredients:**

#### B-ALANINE,N-COCO ALKYL DERIVATIVES, SODIUM SALTS

-	48H EC50	18	mg/l
-	48H EC50	97.5	mg/l

#### C9-11 ALCOHOL ETHOXYLATE

FISH	96H LC50	1-10	mg/l
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### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable. The surfactants contained in this preparation comply with the biodegradability criteria as laid down in regulation (EC) No.648/2004 on detergents.

### 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

**Other adverse effects:** Negligible ecotoxicity.

## 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:** UN1760

### 14.2. UN proper shipping name

**Shipping name:** CORROSIVE LIQUID, N.O.S.  
(SODIUM HYDROXIDE (2%))

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## 14.3. Transport hazard class(es)

Transport class: 8

## 14.4. Packing group

Packing group: III

## 14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

## 14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

## Section 15: Regulatory information

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

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

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

**Phrases used in s.2 and s.3:** EUH208: Contains <name of sensitising substance>. May produce an allergic reaction.

H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H304: May be fatal if swallowed and enters airways.

H312: Harmful 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.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

**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.

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