CLOVER CHEMICALS LTD
'Effective Cleaning Chemicals'

SAFETY DATA SHEET

ZAKOL

Compilation date: 01/08/2008

Revision date: 25/03/2015

Revision No: 7

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

1.1. Product identifier

Product name: ZAKOL

Product code: 501

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: Aquatic Chronic 3: H412; Skin Corr. 1A: H314

Most important adverse effects: Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

Hazard statements: H314: Causes severe skin burns and eye damage.
H412: Harmful to aquatic life with long lasting effects.

Signal words: Danger

[cont...]

Hazard pictograms: GHS05: Corrosion

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

P282: Wear eye protection.

P280: Wear protective gloves.

P260: Do not breathe fumes.

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P315: Get immediate 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.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P362: Take off contaminated clothing.

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:

HYDROCHLORIC ACID

EINECS	CAS	PBT / WEL	CLP Classification	Percent
231-595-7	-	-	Skin Corr. 1B: H314; STOT SE 3: H335	1-10%

BIS(2-HYDROXYETHYL)OLEYLAMINE

246-807-3	25307-17-9	-	Acute Tox. 4: H302; Skin Corr. 1B: H314; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	1-10%

CETYL TRIMETHYL AMMONIUM CHLORIDE

203-928-6	112-02-7	-	Acute Tox. 3: H311; Skin Corr. 1C: H314; Eye Dam. 1: H318; Aquatic Acute 1: H400; Acute Tox. 4: H302; Aquatic Chronic 1: H410	<1%

Section 4: First aid measures

[cont...]

4.1. Description of first aid measures

Skin contact: 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: Do not induce vomiting. 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 conscious, ensure the casualty sits or lies down. 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: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and pain.

Ingestion: There may be soreness and redness of the mouth and throat.

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 hydrogen chloride / phosgene.

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: Refer to section 8 of SDS for personal protection details. 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: Transfer to a suitable container.

[cont...]

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

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:

HYDROCHLORIC ACID...100%

Workplace exposure limits: **Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1 ppm ; 2mg/m3	5 ppm ; 8mg/m3	-	-

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. Gas/vapour filter, type E: sulphur dioxide and other acid gases (EN141).

Hand protection: Gloves (acid resistant).

Eye protection: Safety glasses with side-shields.

Skin protection: Acid-resistant protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Blue

Odour: Pleasant

Evaporation rate: Moderate

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

Viscosity: Viscous

[cont...]

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:	1.04	**pH:**	1.2
VOC g/l:	0		

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.

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of hydrogen chloride / phosgene.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

BIS(2-HYDROXYETHYL)OLEYLAMINE

ORAL	RAT	LD50	300-2000	mg/kg

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

Eye contact: There may be irritation and pain.

Ingestion: There may be soreness and redness of the mouth and throat.

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

[cont...]

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

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

BIS(2-HYDROXYETHYL)OLEYLAMINE

ALGAE	72H ErC50	> 0.01 - 0.1	mg/l
FISH	96H LC50	> 0.1 - 1	mg/l
DAPHNIA	48H EC50	> 0.1 - 1	mg/l

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

Transport class: This product does not require a classification for transport.

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

[cont...]

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

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: H302: Harmful if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H335: May cause respiratory irritation.

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.