Revision: 7 June 2021

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Anti Bacterial Additive 1KG
- Chemical Name: Quaternary ammonium compounds, benzyl (C12 - C16) alkyl dimethyl, chlorides
- CAS Number: 68424-85-1
- EC Number:
- REACH Registration Number:
- Synonyms:

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

- Use of the substance/mixture: Biocidal product for industrial use

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Supplies for Candles & The Soap Kitchen Ltd -

Address of Supplier: Unit E Swinton Bridge Industrial Estate, White Lea Road,S winton
South Yorkshire
S64 8BH, UK

- Telephone: 01709 257151
- Responsible Person: Nicky Story
- Email: customerservice@suppliesforcandles.co.uk

1.4 Emergency telephone number

- Emergency Telephone: 01709 257151 (8AM-4PM)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- CLP: Classification according to CLP (EC No. 1272/2008)
- Met. Corr. 1
- Skin Corr. 1B
- Eye Dam. 1
- Aquatic Acute 1
- Aquatic Chronic 1
- Acute Tox. 4

2.2 Label elements

- Signal Word: Danger

GHS05

GHS07

GHS09

SECTION 2: Hazards identification (....)

2.2.1 Hazard statements

H290 - May be corrosive to metals.

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

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

H400 - Very toxic to aquatic life.

2.2.2 Precautionary statements

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P310 - Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P501 - Dispose of contents/container in accordance with national regulations.

2.3 Other hazards

- Other hazards have not been identified for this product.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.1.1 Quaternary ammonium compounds, benzyl (C12 - C16) alkyl dimethyl, chlorides

CAS Number: 68424-85-1
CLP classification: Acute Tox. 4. H302, Skin Corr. 1B. H314, Eye Dam. 1: H318, Aquatic Acute 1. H400, Aquatic Chronic 1 - H410
EINECS: 270-325-2

3.2 Mixtures

SECTION 4: First aid measures

4.1 Description of first aid measures

- General information: Obtain speccial instructions from the poison information centre: Phone: +44 (0) 844-892-0111 (UK only) also see section 1.4

- Personal protection for the First Aider

SECTION 4: First aid measures (....)

4.1.1 Contact with eyes

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes. Get medical attention if any discomfort continues.

4.1.2 Contact with skin

After contact with skin, wash immediately with plenty of soap and water

Remove contaminated clothing immediately and dispose of safely.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

Transfer to hospital for specialist examination,

4.1.3 Ingestion

Clean mouth with water and drink plenty of water afterwards.

Do not induce vomiting

Never give anything by mouth to an unconscious person

Transfer to hospital for specialist examination,

4.1.4 Inhalation

Supply fresh air; consult a doctor in case of symptoms.

If unconcious, place in recovery position and get medical attention immediately.

Maintain an open airway.

4.2 Most important symptoms and effects, both acute and delayed

- Corrosive damage to gastro-intestinal tract.
- Information for Doctor Probable mucosal damage ay contraindicate the use of gastric lavage.
- Danger of gastric perforation.

4.3 Indication of any immediate medical attention and special treatment needed

- If swallowed, gastric irrigation with activated carbon.
- Rinse eyes thoroughly with physiological saline.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media: Water spray jet, Alcohol-resistant foam, Dry chemical extinguisher
- Unsuitable extinguishing media: High power water jet

5.2 Special hazards arising from the substance or mixture

- In case of fire, toxic incineration products may be released such as; Nitrogen oxides (NOx), Carbon monoxide (CO), Hydrogen chloride (HCl)

5.3 Advice for firefighters

SECTION 5: Firefighting measures (....)

- Wear self contained breathing apparatus.
- Collect contaminated fire extinguishing water separately
- It must not enter drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Particular danger of slipping on leaked/spilled product.
- Wear protective clothing.
- See Section 8
- Keep unprotected persons away.
- When selecting the protective suit attention has to be paid to the complete and safe protection of skin and mucous membranes. Impermable protective clothes, protective boots made of neoprene, complete face protection nd nitrile-rubber-gloves with long tops should be worn.

6.2 Environmental precautions

- As the product is hazardous for the aquatic environment, it must be prevented from reaching surface water.
- Prevent from spreading (e.g. by enclosing with a ring of chemical absorbent).
- Inform authorities in case of contamination of water or sewage system.

6.3 Methods and material for containment and cleaning up

- Collect large amounts in suitable container. Cover the rest with absorbent, mix intensively and collect mechanically. Suitable binder: multi-purpose absorbent. Dispose of contaminated material as waste according to item 13.
- Suitable binder: multi-purpose absorbent
- Dispose of contaminated material as waste according to item 13.
- Decontamination procedure: Quats are incompatible with anionic compounds, e.g. with anionic surfactants. If product is released unintentionally into waste water, drain the contaminated waste water and collect it in an appropriate container. Adjust with sodium lauryl sulphate solution (concentration twice as high as the active ingredient in the wastewate) to a mixture ration 1:1. Request further instructions from the supplier. Polluted surfaces can be decontaminated with a 10% sodium laurl sulphate solution.

6.4 Reference to other sections

- None

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Ensure good exhaust ventilation at the workplace
- It is preferable to handle the product in a closed system.
- Load carefully, avoid splashes.

SECTION 7: Handling and storage (....)

- Risks to the safety and health of workers may not only be created by work involving chemicals but, inter alia by work equipment and the fitting-out of work-places. Those risks shall be identified and evaluated.
- Information about protection against explosion and fire: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

- Store only in the original container
- Information about suitable materials for vessels and piping can be requested from our sales departments Tel: +44 (0) 1606 818800
- Store away from foodstuffs.
- If the product crystallizes at low temperatres, it can be restored by slowly warming the product. The effectiveness is not affected hereby.
- Minimum storage temperature: 10°C
- Protect from frost

7.3 Specific end use(s)

- See Section 1.2
- See Section 1
- No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Components with critical values that require monitoring at the workplace: None established
- Additional information: Information valid at the time of review of safety data sheet.
- General protection and hygiene measures: Use Skin cream for skin protection. avoid contact with skin and eyes. Wash hands during work breaks and at the end of the shift. Provide skin protection plan

8.1.1 DNEL/DMEL

Workers:
Inhalation: Long-term systemic effects: mg/m3
Dermal: Long-term systemic effects: 5.7 mg/kg
Consumers:
Inhalation: Long-ter systemic effects: 1.64 mg/m3
Dermal: Long-term systemic effects: 3.4 mg/kg

8.1.2 PNEC

Fresh water: 0.001 mg/l
Marine water: 0.001 mg/l
Fresh water sediment: 12.27 mg/kg d/w
Marine sediment: 13.09 mg/kg dw
Sewage treatment plant: 0.4 mg/l
Soil: 7 mg/kg dw

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection (....)


Visor


Goggles


Gloves


Suit

- General protection and hygiene measures: Use Skin cream for skin protection. avoid contact with skin and eyes. Wash hands during work breaks and at the end of the shift. Provide skin protection plan.
- Respiratory Protection: Not required
- Hand Protection: Cheical protective gloves according to DIN EN 374 with CE-labelling, Check the condition of protective gloves after ach use for any damages likes holes, cuts or tears., Do not wear protective gloves longer than necessary., After use of gloves apply skin-cleaning agents and skin cosmetics.
- Material of gloves: Nitrile rubber, NBR
- Penetration time of glove material: Thickness: 0.4mm Break-through time: 480 mins Material: Nitrile Permeation: Level 6
- Gloves made for mechanical protection do not provide protection against chemicals.
- Eye Protection: Face shield (visor). Use visor in combination with goggles. A device for rinsing eyes must be available at the work place.
- Body Protection: Protective clothing, Apron, Full head, face and neck protection
- Risk management measures: The operators shall be instructed adaquately, The workplace shall be inspected regularly by competent personnel e.g. the safety representative

8.3 Environmental exposure controls

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Liquid
- Colour: Colourless to yellowish clear, This product could also be dyed as blue or green
- Odour: Mild
- pH: at 20°C 6.0 - 9.0 (VK-Spez.)
- Melting point/Range: ca. 0°C
- Boiling Point/Range: >107°C
- Solubility in water: Fully miscible
- Self-flammability Product is not self-igniting
- Danger of explosion Product is not explosive
- Vapour Pressure: at 20°C 23 mbar (H^2O)
- Density 0.975 - 0.995 g/cm3 at 20°C
- Viscosity: C.a. 300 mPa.s at°C

9.2 Other information

- No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

- Corrosive action on metals possible

SECTION 10: Stability and reactivity (....)

10.2 Chemical stability

- Conditions to be avoided: No decomposition if used and stored according to specifications.
- Minimum shelf life: 24 months from production date, if stored at a temperature of about 20 °c

10.3 Possibility of hazardous reactions

- No dangerous reactions are known

10.4 Conditions to avoid

- Avoid heat

10.5 Incompatible materials

- Strong acids and Strong bases
- Oxidising Agents
- Anionic compounds

10.6 Hazardous decomposition products

- None if storage and handling is done according to specification.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- LD50 (Oral, Rat): 795 mg/kg
- ATE mix: Dermal >5000 mg/kg (calculated)
- OECD 404 (Dermal, Skin, Rabbit) S 478 S 479: Corrosive
- Causes serious eye damage (Assessment utline in Annex I, CLP 1272/2008/EC non sensitising

11.2 Serious eye damage/irritation

- See above

11.3 Skin corrosion/irritation

- See above

11.4 Ingestion

- See above

11.5 Inhalation

- No data available

11.6 Carcinogenicity

- No data available

11.7 Germ cell mutagenicity

Genotoxicity in vitro:

SECTION 11: Toxicological information (....)

Test Type: Ames test
Species: Salmonella typhimurium
Metabollic activation: Yes
Method: OECD Test Gudieline 471
Result: not mutagenic
GLP: yes

Test type: Chromosome aberration test in vitro
Species: Human Lymphocytes
Metabolic activation: yes
Method: OECD Test Guideline 473
Result: not clastogenic
GLP: Yes

Test Type: gene mutation test
Species: Chinese hamster ovary cells
Metabolic activation: yes
Method: OECD Test Guideline 476
Result: not mutagenic
GLP: yes

Test Type: unscheduled DNA synthesis assay
Species: rat hepatocytes
Method: OECD Test Guideline 482
Result: negative
GLP: yes

Genotoxicity in vivo:
Test Type: in vivo micronucleus test
Species: Mouse (male and female)
Cell Type: Bone marrow
Application Route: Oral (gavage)
Method: OECD Test Guideline 474
Result: not mutagenic
GLP: yes

11.8 Teratogenicity

Effects of fertilty:
Test Type: Two-generation study
Species: Rat, Female
Application Route: Ingestion
Dose: 0-300-1000-2000 ppm
General Toxicity - Parent: NOAEL: 67 - 106 mg/kg body weight
General Toxicity F1: 54 - 86 mg/kg body weight
Fertility: NOAEL: 112 - 161 mg/kg body weight
Method: OECD Test Guideline 416
Result: Animal testing did not show any effectson fertility
GLP: yes

Test Type: Two-generation study
Species: Rat, Male
Application Route: Ingestion
Dose: 0-300-1000-2000 ppm
General Toxicity - Parent:NOAEL: 51 - 102 mg/kg body weight
General Toxicity F1: NOAEL: 41 - 83 mg/kg body weight
Fertility: NOAEL: 139 - 198 mg/kg body weight
Method: OECD Test Guideline 416
Result: Animal testing did not show any effects on fertility

SECTION 11: Toxicological information (....)

GLP: yes

Effects of foetal development:
Species: Rat
Strain: Sprague-Dawley
Application Route: Oral
Dose: 0-10-30-100 milligram per kilogram
General toxicity Maternal: NOEL: 8.1 mg/kg dw/day
DevelopmentalToxicity: NOAEL: 81 mg/kg body weight
Method: OECD Test Guideline 414
Result: No effects on fertility and early embryonic development were detected.
GLP: Yes

Repeated dose toxicity:

Species: Dog, female
NOAEL: 45 mg/kg
Application Route: Dietary
Exposure time: 90 d
Number of exposures: daily
Dose: 0-500-1500-3000 ppm

Species: Dog, male
NOAEL: 50 mg/kg
Application Route: Dietary
Exposure time: 90 d
Number of exposures: daily
Dose: 0-500-1500-3000 ppm

Species: Rat, male
NOAEL: 31 mg/kg
Application Route: Dietary
Exposure time: 90 d
Number of exposure: Daily
Dose: 0-6-31-62 mg/kg
Method: OECD Test Guideline 408
GLP: yes

Species: Rat, female
NOAEL: 38 mg/kg
Application Route: Dietary
Exposure time: 90 d
Number of exposures: Daily
Dose: 0-8-38-77 mg/kg
Method: OECD Test Guideline 408
GLP: yes

SECTION 12: Ecological information

12.1 Toxicity

Algae: (96 h) ErC50: 0.06 mg/l
Daphnia (48 h) EC50: 0.02 mg/l
Fish (96 h) LC50: 0.85 - 1.2 mg/l

Toxicity to fish:
NOEC (Pimephales promelas (fathead minnow): 0.0322 mg/l

SECTION 12: Ecological information (....)

Exposure time: 34 d
Test Type: Early-life Stage
Analytical monitoring: yes
Method: EPA-FIFRA
GLP: yes

NOEC (Lepomis macrochirus (Bluegill sunfish)): 0.456 mg/l
Exposure time: 96 h
Analytical monitoring: yes
Method: US-EPA
GLP: yes

LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.515 mg/l
Exposure time: 96 h
Analytical monitoring: yes
Method: US-EPA
GLP: yes

Toxicity to daphnia and other aquatic invertebrates:
EC50 (Daphnia magna (water flea)): 0.016 mg/l
Exposure time: 48h
Test Type: Immobilization
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes

NOEC (Daphnia magna (Water flea)): >=0.00415 mg/l
Exposure time: 21 d
Test Type: Reproduction Test
Analytical monitoring: yes
Method: EPA-FIFRA
GLP: Yes

Toxicity to algae:
ErC50 (Pseudokirchineriella subcapitata (green Algae)); 0.049 mg/l
Exposure time: 72 h
Test Type: Cell multiplication inhibition test
Analytical monitoring: yes
Method: OECD test Guideline 201
GLP: yes

M-Factor (Short-term (acute) aquatic hazard): 10

M-Factor (Long-term (chronic) aquatic hazard): 1

Toxicity to microorganisms:
EC50 (activated sludge): 7.75 mg/l
Exposure time: 3 h
Test type: Respiration inhibition
Method: OECD Test Guideline 209
GLP: yes

Toxicity to soil dwelling organisms:
Test type: Acute toxicity
LC50: 7070 mg/kg
Exposure time: 14 d
Species: Eisena fetida (earthworms)
Method: OECD Test Guideline 207

SECTION 12: Ecological information (....)

Test type: Soil Microflora
EC50: > 1000 mg/kg
Exposure time: 28 d
Method: OECD Test Guideline 216
GLP: yes

Plant toxicity:
EC50: 277 - 1900 mg/kg
Exposure time: 14 d
End point: Growth inhibition
Method: OECD Test Guideline 208

12.2 Persistence and degradability

- This substance is not readily biodegradable

12.3 Bioaccumulative potential

- Bioaccumulative potential: Bioaccumulation potential

12.4 Mobility in soil

- Readily absorbed into soil.

12.5 Results of PBT and vPvB assessment

- This mixture does not contain substances that meet the PBT or vPvB criteria or REACH annex XIII

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Avoid release to the environment. Refer to special instructions/Safety data sheets
- Disposal should be in accordance with local, state or national legislation
- Must be specially treated under adherence to official regulations.
- Appropriate disposal operations according to directive 2008/98/EC on waste: D 10 Incineration on land
- Remove all product and packaging and clean thoroughly before recycling. Use water if necessary with cleaning agent.

SECTION 14: Transport information

14.1 UN number or ID number

- UN No.: 1760

14.2 UN proper shipping name

- Proper Shipping Name: 1760 Corrosive Liquid, N.O.S (Quaternary Ammonium Compounds, Benzyl (C12-16) alkyl dimethyl chlorides), Marine Pollutant, Environmentally Hazardous

14.3 Transport hazard class(es)

SECTION 14: Transport information (....)

- Hazard Class: 8

14.4 Packing group

- Packing Group: II

14.5 Environmental hazards

- Marine Pollutant: Yes

14.6 Special precautions for user

- Warning: Corrosive substances
- Kemler number 80
- EMS number F-A,S-B

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

- UN "Model Regulation" UN1760, Corrosive liquid, N.O.S (Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides) Environmentally hazardous, 8, II

SECTION 15: Regulatory information

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

- Take note of directive 94/33/EC on the protection of young people at work.
- Take note of directive 92/85/EC on the safety and health of pregnant women at work.
- Regulations which may apply in event of accident: Control of Major Accident Hazards (COMAH)
- Critical quantity values according to the regulations on accidents (Seveso Directive) should be adhered to
- PCS-no (IRL): 93746
- VOC according to directive 1999/13/EC: This product does not contain any relevant amounts of "Volatile Organinc Compounds" (VOC)
- VOC according to Directive 2004/42/EC: The product does not contribute significantly to the total content of VOCs in paints and varnishes.
- SVOC according to EU-Ecolabel for interior and exterior paints 2014/312/EU: This product does not contain any Semi Volatile Organic compounds in the definition of the 2014/312/EU.

15.2 Chemical safety assessment

- A chemical safety assessment has not been carried out.

SECTION 16: Other information

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

--- end of safety datasheet ---