

SAFETY DATA SHEET

according to Regulation (EC) No.1907/2006

Version 2.6 Revision Date 02.03.2017

**Safety Data Sheet
Quaternium-73****Section 1: Identification of the Substance/Preparation and of the Company/Undertaking****Identification of the substance or preparation****1.1 Product identifiers****Product** : Quaternium-73**Name****Chemical Name** : 3-Heptyl-2-[(3-heptyl-4-methyl-3H-thiazol-2-ylidene)methyl]-4-methylthiazolium iodide; Kankohso 201; Thiazolium, 3-heptyl-2-((3-heptyl-4-methyl-2(3H)-thiazolylidene)methyl)-4-methyl-, iodide**REACH No.** : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.**1.2 Relevant identified uses of the substance or mixture and uses advised against****Identified uses** : Antistatic; Antimicrobial; Acne treatment**1.3 Details of the supplier of the safety data sheet****Company** : M.C. Biotec Inc.
47-505, Demin Huayuan
Nantong, China**Tel** : +86-139-13923033**Fax** : +86-10-80115555 ext 441505**E-mail** : mc@mcbiotec.com**address****website** : www.mcbiotec.com**1.4 Emergency telephone number****Emergency Phone #** : +86-139-13923033**Section 2: Hazards Identification****2.1 Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 **Other hazards** - none

Section 3: Composition and Information on Ingredients

3.1 **Substances**

INCI Name : Quaternium-73
 Synonyms : 3-Heptyl-2-[(3-heptyl-4-methyl-3H-thiazol-2-ylidene)methyl]-4-methylthiazolium iodide
 Formula : $C_{23}H_{39}IN_2S_2$
 Molecular Weight : 534.61g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Quaternium-73		
CAS-No. 15763-48-1	--	<= 100 %
EC-No. 239-852-5		

Section 4: First Aid Measures

4.1 **Description of first aid measures**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 **Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 **Indication of any immediate medical attention and special treatment needed**

no data available

Section 5: Fire Fighting Measures

5.1 **Extinguishing media**

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, sulfur dioxide, hydrogen iodide

5.3 Advice for firefighters

Wear self-contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 . Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: powder Colour: yellow
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available it.
g) Flash point	No data available
h) Evaporation rate	No data available

i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
l)	Vapour density	No data available
m)	Relative density	No data available
n)	Water solubility	0.6068mg/L @ 25 °C (est)
o)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

9.2 Other safety information

no data available

Section 10: Stability and Reactivity
10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Bases, Reducing agents, Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - sulfur dioxide, hydrogen iodide

In the event of fire: see section 5

Section 11: Toxicological Information
11.1 Information on toxicological effects
Acute toxicity

LD50 oral rat: 460 mg/kg

Toxic effects:

Vascular - regional or general arteriolar or venous dilation
Lungs, Thorax, or Respiration - respiratory stimulation
Gastrointestinal - hypermotility, diarrhea

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

irritant

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

Repeated dose toxicity - No data available(Azelaic acid)

RTECS: CM1980000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

12.1 Toxicity

Toxicity to fish No data available

Toxicity to daphnia and other aquatic invertebrates No data available

Toxicity to algae No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

no data available

Section 13: Disposal Considerations

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

14.1 UN number

ADR/RID:-

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID:

Not dangerous goods

IMDG:	Not dangerous goods	
IATA:	Not dangerous goods	
14.3 Transport hazard class(es)		
ADR/RID: -	IMDG:-	IATA:-
14.4 Packaging group		
ADR/RID:-	IMDG:-	IATA:-
14.5 Environmental hazards		
ADR/RID: no	IMDG Marine pollutant: no	IATA: no
14.6 Special precautions for user		
Further information		
No data available		
Section 15: Regulatory Information		
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture		
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 .		
15.2 Chemical Safety Assessment		
For this product a chemical safety assessment was not carried out		
Section 16: Other Information		
Disclaimer		
<p><i>The information above is based on our present knowledge. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. Users should make their own investigations to determine the suitability of the information for their particular purposes.</i></p>		
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