

Kemai(Tianjin) Chemical Technical Co.,Ltd. Gongnong Village,Gulin Street,Dagang Dist, Tianjin300272,China Tel: 022-24373333 022-24370313 Fax: 022-24379994

MATERIAL SAFTY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product label name 2,2,4-Trimethyl-1,2-dihydroquinoline, polymerized

Supplier KEMAI (Tianjin) CHEMICAL TECHNICAL CO., LTD.

Gongnong Village, Gulin Street, Dagang Dist, Tianjin P. R. CHINA

Tel: (022) 24373333,

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Intended use Antioxidant

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a substance in conformance to EC directives.

Information on hazardous ingredients

Chemical description 2,2,4-Trimethyl-1,2-dihydroquinoline, polymerized

Composition / information on ingredients

Number % w/w CAS-number Chemical name

CAS-number 26780-96-1 2,2,4-Trimethyl-1,2-dihydroquinoline polymer

Synonym(s): 1,2-Dihydro-2,2,4-trimethylquinoline, oligomers

Number EC-number Annex-1 number Symbol(s) Risk-phrase(s)

1 500-051-3 none none

Other information Formula: (C12H15N)n.

3. HAZARDS IDENTIFICATION

Not classified as hazardous according to the EEC Dangerous Substance Directive and Dangerous Preparation Directive.

4. FIRST AID MEASURES

Symptoms and effects Dust may be irritating to the respiratory tract and cause symptoms of bronchitis. First aid

General In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation Move to fresh air. If symptoms persist, seek medical advice.

Skin Wash immediately with soap and water.

Eye Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to

ensure thorough rinsing. Seek medical advice if irritation develops.

Ingestion Rinse mouth, give water to drink.

Advice to physician No specific recommendations.

5. FIRE-FIGHTING MEASURES

Extinguishing media waterspray, water mist, foam, dry chemical powder, CO2

Unsuitable extinguishing media waterjet.

Special exposure hazards Emits toxic fumes under fire conditions.

Hazardous decomposition/

combustion products

carbon monoxide (CO), nitrous gases (NOx).

Protective equipment Wear self contained breathing apparatus.



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Other information Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions For personal protection see Section 8. Avoid dust generation.

Environmental precautions Do not flush into public water courses. Avoid discharge into the environment.

Methods for cleaning up Collect as much as possible in a clean container for (preferable) reuse or disposal.

7. HANDLING AND STORAGE

Handling Avoid dust generation. The usual precautions for handling chemicals should be observed.

Fire and explosion prevention No specific recommendations.

Storage requirements Store in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls Avoid dust generation.

Exposure limits No exposure limit has been established.

Name

2,2,4-Trimethyl-1,2-dihydroquinoli

ne polymer

In this country no exposure limit has been established

Personal protection

Respiratory Avoid breathing dust.

Hand Wear protective gloves.

Eye Wear safety goggles.

Skin and body Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance pastilles

Colour light brown

Odour faint, aromatic

Boiling point/range not determined

Melting point/range min. 83 °C

Flash point 243 °C (Cleveland, open cup)

Flammability solid substance: not (in)flammable.

Autoignition temperature not determined

Explosive properties dust: dust explosion hazard.

Explosion limits LEL: < 10 mg/l (dust).

Oxidizing properties not applicable

Vapour pressure negligible

Density 1100 kg/m³ (20 °C)

Bulk density 600-630 kg/m³

Solubility in water 0.0025 - 0.0032 kg/m3 (25 °C)

Solubility in other solvents Ethanol, acetone, toluene

pH value approx. 7 (Aqueous dispersion)

Partition coefficient



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n-octanol/water 3.22 Relative vapour density (air=1) not applicable Viscosity not applicable **10. STABILITY AND REACTIVITY** Stability Stable under recommended storage and handling conditions (see section 7). Conditions to avoid No specific recommendations. Materials to avoid No specific recommendations. Hazardous decomposition products Thermal decomposition products: carbon monoxide (CO), nitrous gases (NOx). **11. TOXICOLOGICAL INFORMATION** Name 2,2,4-Trimethyl-1,2-dihydroquinoline polymer Acute toxicity Oral LD50 rat: 2225 mg/kg. Dermal LD50 rabbit: >5010 mg/kg. Irritation Skin Non-irritating Eve Slightly irritating to eyes but not sufficient for classification. Sensitization Patch testing (Human experience): May cause sensitization in susceptible individuals. Genotoxicity Not mutagenic (in vitro) **12. ECOLOGICAL INFORMATION** Name 2,2,4-Trimethyl-1,2-dihydroquinoline, polymerized **Ecotoxicity** fish 96h-LC50 (Lepomis macrochirus): 54 mg/l. 96h-LC50 (Oncorhynchus mykiss): 50 mg/l. 96h-LC50 (Pimephales promelas): 64 mg/l. daphnia 48h-EC50 (Daphnia magna): 5.8 mg/l. algae 96 h-EC50 (Cell count): > 1000 mg/l. Fate Degradation Biotic CO2 evolution: 8 %. Not readily biodegradable. **13. DISPOSAL CONSIDERATIONS** Product Small quantities: According to local regulations (most probably controlled incineration). Large quantities: Consult KEMAI for special advice. Contaminated packaging According to local regulations. **14. TRANSPORT INFORMATION** Land transport (ADR/ RID) ADR class not restricted RID class not restricted ADR/RID packing group not relevant Hazard Identification No. not relevant Substance Identification No. not relevant TREM-Card not relevant UN number none Proper Shipping Name not relevant



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Sea transport (IMDG-code/ IMO) IMO/IMDG code not relevant Class not restricted Packing group not relevant UN number none EMS not relevant Subsidiary Risk not relevant Marine pollutant no Proper Shipping Name not relevant Air transport (ICAO-TI/ IATA-DGR) ICAO-TI/IATA-DGR UN number none Class not restricted Packing group not relevant Proper Shipping Name not relevant **15. REGULATORY INFORMATION** Chemical description 2,2,4-Trimethyl-1,2-dihydroquinoline, polymerized Labelling according to EC directives EC-number See section 2 Classification based on Tests Symbol(s) none R(isk) phrase(s) none S(afety) phrase(s) none **16. OTHER INFORMATION**

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or

in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

*** END OF MSDS ***