

MATERIAL SAFETY DATA SHEET
According to EC-directive 93/112/EC

TMQ(RD)

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

Product label name 2,2,4-Trimethyl-1,2-dihydroquinoline, polymerized
Supplier: Trigonal Concourse Inc.
20 Hongkong Middle Road, Qingdao 266071,
China
Tel/Fax: +86 532 85760953

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	
1	>97	26780-96-1	2,2,4-Trimethyl-1,2-dihydroquinoline polymer	
Number	EC-number	Annex-1 number	Symbol(s)	Risk-phrase(s)
1	polymer	#polymer	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 (NO_x).

Protective equipment Wear self contained breathing apparatus.

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.

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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-dihydroquinoline 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. 80 °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/m ³ (20 °C)
Bulk density	600-630 kg/m ³
Solubility in water	0.0025 - 0.0032 kg/m ³ (25 °C)
Solubility in other solvents	Ethanol, acetone, toluene
pH value	approx. 7 (Aqueous dispersion)
Partition coefficient 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
Eye	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)
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	

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12. ECOLOGICAL INFORMATION

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 Flexsys for special advice.
Contaminated packaging According to local regulations.

14. TRANSPORT INFORMATION

Land transport (ADR/ RID)

ADR class	not restricted	ADR/RID item no.	not relevant / not relevant
RID class	not restricted	ADR/RID packing group	
Hazard Identification No.	not relevant	Substance Identification No.	not relevant
TREM-Card	not relevant	UN number	none
Proper Shipping Name	not relevant		

Sea transport (IMDG-code/ IMO)

IMO/IMDG code	not relevant	Class	not restricted
Packing group	not relevant	UN number	none
EMS	not relevant	MFAG	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
Wassergefährdungsklasse (WGK)	2 (VwVwS Anhang 2 Nr. 1318)

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.