

MATERIAL SAFETY DATA SHEET

: According to EC-directive 2001/58/EC

Rubber Antioxidant TMQ(RD)EHQ

HS Code: 38123100.00

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product label name	Polymerized-2,2,4-trimethyl-1,2-dihydroquinoline Qingdao YLSCH Industry&Trade Co.,Ltd
Supplier	Room 501,2-3 Unit. No.8,Zhengzhou Road, Qingdao,China. TEL: +86 18661665800
Emergency telephone	TEL: +86 18661665800
Intended use	Rubber Antioxidant

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Polymerized-2,2,4-trimethyl-1,2-dihydroquinoline
CAS NO.	26780-96-1
Chemical description	Amber to brown granule
TSCA NO.	none
EINECS NO.	none
Other information	(C ₁₂ H ₁₅ N) _n

3. HAZARDS IDENTIFICATION

Dust suspended in air ignites easily. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

Symptoms and effects	Dust may be irritating to the respiratory tract and cause symptoms of bronchitis. Repeated contact may cause skin sensitization.
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.

Ingestion	Seek medical advice if irritation develops. Only when conscious, rinse mouth, give plenty of water to drink. Don't induce vomiting. Seek medical advice.
Advice to physician	No specific recommendations.

5. FIRE-FIGHTING MEASURES

Extinguishing media	Waterspray, water mist, foam, dry chemical powder, CO ₂
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.
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. Collect as much as possible in a clean container for (preferable) reuse or disposal.
Methods for cleaning up	

7. HANDLING AND STORAGE

Handling	Avoid dust generation. The usual precautions for handling chemicals should be observed.
Fire and explosion prevention	Dust/air mixtures may ignite violently upon exposure to sparks or sources of ignition.
Storage requirements	Store in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	Avoid dust generation.Ensure good ventilation and local exhaustion of the working area.
Exposure limits	
Name: Polymerized-2,2,4-trimetyl-1,2-dihydroquinoline	No exposure limit has been established
Personal protection	
Respiratory	Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory equipment.
Hand	Wear protective gloves. PVC or rubber gloves.

Eye	Wear safety goggles.
Skin and body	Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber to brown granule	Colour	Amber to brown
Odour	faint, aromatic	Boiling point	----
Melting point ≥	80.0-110.0℃	Flash point	243℃
Flammability	Solid:substance:not (in)flammable.	Explosion limits	----
Explosive properties	Dust:dust-explosion hazard	Decomposition temperature	----
Oxidizing properties	not applicable	Vapour pressure	Negligible
Density	1.095 Typical	Bulk density	----
Ash content (%) ≤	0.50	Solubility in other solvents	----
Monomer Content (%)	Approx 3	Partition coefficient	Log Pow = 3.22
Isopropyl bis Anilin %	Approx 2.5	Loss on drying(%) ≤	0.7
Viscosity	----	Primary Amines (%)	Approx 8
Strrength of grain (N)	0.6-2.5	Zinc content %	----

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions (see section 7).
Conditions to avoid	Heat,sources of heat,naked flames,sparks
Materials to avoid	Strong oxidising agents
Hazardous decomposition products	Thermal decomposition products: carbon monoxide (CO), nitrous gases (NOx).

11. TOXICOLOGICAL INFORMATION

Name	Polymerized-2,2,4-trimetyl-1,2-dihydroquinoline
Acute toxicity	
Oral LG50	rat: 2225mg/kg.
Dermal LD50	rabbit: <5010 mg/kg.
Irritation	
Skin	Non- irritating to skin .
Eye	Slightly irritating to eyes but not sufficient for classification.

**12. ECOLOGICAL INFORMATION**

Name	Polymerized-2,2,4-trimetyl-1,2-dihydroquinoline
Ecotoxicity	
	96h-LC50 (Lepomis macrochirus): 54 mg/l.
Fish	96h-LC50 (Oncorhynchus mykiss): 50 mg/l.
	96h-LC50 (Pimephales promelas): 64mg/l.
Daphnia	48h-EC50 (Daphnia magna): 5.8 mg/l.
Algae	96h-IC50 (Selenastrum capricornutum): > 1000mg/l.
Fate	
Degradation Biotic	Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Product	Avoid discharge into the environment Small quantities: According to local regulations. Large quantities: Consult YLSCH Chemical for special advice.
Contaminated packaging	According to local regulations. Waste code number: Please refer to your specific industry
Other information	in the European Waste Catalogue.

14. TRANSPORT INFORMATION**Land transport (ADR/ RID)**

ADR class	----	RID class	----
ADR/RID packing group	III	Hazard Identification No.	----
Substance Identification No.	3077	UN number	3077

Environmentally hazard us substance, solid, n.o.s.

Proper Shipping Name (Polymerized-2,2,4-trimetyl-1,2-dihydroquinoline)**Sea transport (IMDG-code/ IMO)**

Correct technical name	----	IMDG Class	
UN Number	----	Packaging group	
EMS Number	----		

Air transport (ICAO-TI/ IATA-DGR)

ICAO-TI/IATA-DGR Class	----	UN number	----
Packing group	Environmentally hazardous substance, solid, n.o.s.		
Correct technical name	(Polymerized-2,2,4-trimetyl-1,2-dihydroquinoline)		

15. REGULATORY INFORMATION

Chemical description	Polymerized-2,2,4-trimethyl-1,2-dihydroquinoline
Labelling according to EC directives	
EC-number	See section 2
Classification based on	Annex-1 to directive 67/548/EEC
	R 43 May cause sensitization by skin contact
R(isk) phrase(s)	May cause long-term adverse effects in the aquatic environment.
	S 24 Avoid contact with skin
	S 37 Wear suitable gloves
S(afety) phrase(s)	S 60 This material and its container must be disposed of as hazardous waste
	S 61 Avoid release to the environment. Refer to special instructions/Safety data sheets
Other information	To be displayed on the label: "EC label".
Wassergefährdungsklasse (WGK)	2 (VwVwS Anhang 3, 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.
