



MATERIAL SAFETY DATA SHEET

1. Identification of the Substance and of the Company

1.1 Product identifiers

Product name : Coenzyme Q-10

Synonyms Ubiquinone-10

CAS-No. : 303-98-0

EC number: 206-147-9

Molecular Formula $C_{59}H_{90}O_4$

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Aurora Industry Co.,Ltd.

Room 7033, No.9-1, Haifu Road, Dalian Free Trade Zone, China

Telephone : 0411-82288674

2. Hazards Identification

2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements

None required

2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

3. Composition/Information on Ingredients

3.1. Substances

Component	CAS No	EC No	Weight %	CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567



2,5-Cyclohexadiene-1,4-dione, 2-(3,7,11,15,19,23,27,31,35,39- decamethyl -2,6,10,14,18,22,26,30,34,38-tet racontadec aenyl)-5,6-dimethoxy-3-methyl- , (all-E)-	303-98- 0	EEC No. 206-14 7-9	>95	
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REACH registration number	-
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Full text of Hazard Statements: see section 16

4. First Aid Measures

4.1 Description of first aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Self-Protection of the First Aider	No special precautions required.

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

None reasonably foreseeable.

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

Notes to Physician	Treat symptomatically.
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5. Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing agents

Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO₂).

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.



6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

6.4 Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

7. Handling and Storage

7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

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

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK)

(Germany)

Class 11

7.3. Specific end use(s)

Use in laboratories

8. Exposure Controls/Personal Protection

8.1. Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

No information available



Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Engineering Measures

None under normal use conditions.

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles)
(European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber Neoprene Natural rubber PVC	See manufacturers recommendations	-	EN 374	(minimum requirement)

Skin and body protection Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Respiratory Protection No protective equipment is needed under normal use conditions.

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced
Recommended Filter type: Particle filter

Small scale/Laboratory use Maintain adequate ventilation

Environmental exposure controls No information available.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State Solid

Appearance

Odor Odorless

Odor Threshold No data available



Melting Point/Range	49 °C / 120.2 °F
Softening Point	No data available
Boiling Point/Range	No information available
Flammability (liquid)	Not applicable Solid
Flammability (solid,gas)	No information available
Explosion Limits	No data available
Flash Point	No information available Method - No information available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
pH	No information available
Viscosity	Not applicable Solid
Water Solubility	Insoluble
Solubility in other solvents	No information available
Partition Coefficient (n-octanol/water)	
Vapor Pressure	No data available
Density / Specific Gravity	No data available
Bulk Density	No data available
Vapor Density	Not applicable Solid
Particle characteristics	No data available
9.2. Other information	
Molecular Formula	C59 H90 O4
Molecular Weight	863.37
Evaporation Rate	Not applicable - Solid

10. Stability and Reactivity

10.1 Reactivity

None known, based on information available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

10.4 Conditions to avoid

Incompatible products. Excess heat. Avoid dust formation.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2).

11. Toxicological Information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008



Product Information

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met
Dermal No data available
Inhalation No data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
2,5-Cyclohexadiene-1,4-dione, 2-(3,7,11,15,19,23,27,31,35,39-d ecamethyl-2,6,10,14,18,22,26,30 ,34,38-tetracontadecaenyl)-5,6-d imethoxy-3-methyl-, (all-E)-	>20000 mg/kg (Mouse)	-	-

(b) skin corrosion/irritation;

No data available

(c) serious eye damage/irritation;

No data available

(d) respiratory or skin sensitization;

Respiratory

No data available

Skin

No data available

(e) germ cell mutagenicity;

No data available

(f) carcinogenicity;

No data available

There are no known carcinogenic
chemicals in this product

(g) reproductive toxicity;

No data available

(h) STOT-single exposure;

No data available

(i) STOT-repeated exposure;

No data available

Target Organs

No information available.

(j) aspiration hazard;

Not applicable

Solid

Other Adverse Effects

The toxicological properties have not
been fully investigated.

Symptoms / effects, both acute and delayed

No information available.

11.2. Information on other hazards

Endocrine Disrupting Properties

Assess endocrine disrupting properties
for human health. This product does not
contain any known or suspected
endocrine disruptors.

12. Ecological Information

12.1. Toxicity

Ecotoxicity effects

Contains no substances known to be hazardous to the
environment or that are not degradable in waste water
treatment plants.

12.2. Persistence and degradability

Persistence

Insoluble in water.



12.3. Bioaccumulative potential	May have some potential to bioaccumulate
12.4. Mobility in soil	Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility.
12.5. Results of PBT and vPvB assessment	No data available for assessment.
12.6. Endocrine disrupting properties	
Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors
12.7. Other adverse effects	
Persistent Organic Pollutant	This product does not contain any known or suspected substance
Ozone Depletion Potential	This product does not contain any known or suspected substance

13. Disposal Considerations

13.1. Waste treatment methods

Waste from Residues/Unused Products

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Contaminated Packaging

Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.

European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

Other Information

Waste codes should be assigned by the user based on the application for which the product was used.

14. Transport Information

IMDG/IMO Not regulated

- 14.1. UN number
- 14.2. UN proper shipping name
- 14.3. Transport hazard class(es)
- 14.4. Packing group

ADR Not regulated

- 14.1. UN number
- 14.2. UN proper shipping name
- 14.3. Transport hazard class(es)



14.4. Packing group

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

No hazards identified

14.6. Special precautions for user

No special precautions required.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

15. Regulatory Information

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL),

Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia

(AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic

Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
2,5-Cyclohexadiene-1,4-dione,2-(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaenyl)-5,6-dimethoxy-3-methyl-, (all-E)-	303-98-0	206-147-9	-	-	X	X	KE-09397	-	-

Component	CAS No	TSCA Inventory notification - Active- Inactive	DSL	NDSL	AICS	NZIoC	PICCS	
2,5-Cyclohexadiene-1,4-dione,2-(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaenyl)-5,6-dimethoxy-3-methyl-, (all-E)-	303-98-0	X	ACTIVE	-	X	-	X	X



Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number

Authorisation/Restrictions according to EU REACH

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) -Annex XVII -Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaenyl)-5,6-dimethoxy-3-methyl-, (all-E)-	303-98-0			

Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
2,5-Cyclohexadiene-1,4-dione,2-(3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaenyl)-5,6-dimethoxy-3-methyl-, (all-E)-	303-98-0	Not applicable	Not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment



WGK Classification

Water endangering class = 3 (self classification)

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

16. Other Information

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aurora Industry Co.,Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See the reverse side of invoice or packing slip for additional terms and conditions of sale.

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