

SAFETY DATA SHEET

Revision Date 24-Dec-2021

Revision Number 4

1. Identification

Product Name

2,5-Dihydroxy-1,4-benzoquinone

Cat No. :

AC187460000; AC187460250; AC187461000

CAS No Synonyms

No information available

Recommended Use Uses advised against

Laboratory chemicals. Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

<u>Company</u>

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute or	al toxicity	Category 4
Acute de	ermal toxicity	Category 4
Acute In	halation Toxicity - Dusts and Mists	Category 4
Skin Co	rosion/Irritation	Category 2
Serious	Eye Damage/Eye Irritation	Category 2
Specific	target organ toxicity (single exposure)	Category 3

Label Elements

Signal Word Warning

Hazard Statements

Causes skin irritation Causes serious eye irritation Harmful if swallowed, in contact with skin or if inhaled

Wash face, hands and any exposed skin thoroughly after handling



Precautionary Statements Prevention

Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell Skin IF ON SKIN: Wash with plenty of soap and water Call a POISON CENTER or doctor/physician if you feel unwell If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse Eves IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention Indestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth Storage Store in a well-ventilated place. Keep container tightly closed Store locked up Disposal Dispose of contents/container to an approved waste disposal plant Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %
2,5-Cyclohexadiene-1,4-dione, 2,5-dihydroxy-	615-94-1	98

4. 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 soap and plenty of water while removing all contaminated clothes and shoes.							
Inhalation	Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration.							

ngestion	Clean mouth with water. G	et medical attention.							
lost important symptoms and ffects	No information available.								
otes to Physician	Treat symptomatically								
	5. Fire-fightir	ng measures							
uitable Extinguishing Media	Water spray. Carbon dioxid	de (CO 2). Dry chemical. Chemi	ical foam.						
Insuitable Extinguishing Media No information available									
Flash Point No information available Method - No information available									
Autoignition Temperature	Not applicable								
Upper	No data available								
Lower	No data available								
Sensitivity to Mechanical Impa Sensitivity to Static Discharge	No information available								
Specific Hazards Arising from the	Chemical								
Seep product and empty container av	way from heat and sources of	ignition.							
Carbon monoxide (CO). Carbon diox rotective Equipment and Precaut is in any fire, wear self-contained bro	ions for Firefighters	emand, MSHA/NIOSH (approv	ved or equivalent) and full						
Carbon monoxide (CO). Carbon diox Protective Equipment and Precaut as in any fire, wear self-contained bro protective gear.	ions for Firefighters eathing apparatus pressure-d Flammability	emand, MSHA/NIOSH (approv Instability 0	Physical hazards						
Farbon monoxide (CO). Carbon diox Protective Equipment and Precaut Is in any fire, wear self-contained bro- rotective gear. IFPA Health	ions for Firefighters eathing apparatus pressure-d Flammability 1	Instability 0							
carbon monoxide (CO). Carbon diox protective Equipment and Precaut is in any fire, wear self-contained bro rotective gear. IFPA Health 2	ions for Firefighters eathing apparatus pressure-d Flammability 1 6. Accidental re	Instability 0 lease measures	Physical hazards N/A						
Carbon monoxide (CO). Carbon diox Protective Equipment and Precaut Is in any fire, wear self-contained bro- rotective gear. IFPA Health 2 Personal Precautions	ions for Firefighters eathing apparatus pressure-d Flammability 1 6. Accidental re	Instability 0 ease measures n. Use personal protective equ	Physical hazards N/A						
Carbon monoxide (CO). Carbon diox Protective Equipment and Precaut Is in any fire, wear self-contained bro- rotective gear. IFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clear	ions for Firefighters eathing apparatus pressure-d Flammability 1 6. Accidental re Ensure adequate ventilatio See Section 12 for addition	Instability 0 Pease measures n. Use personal protective equival Ecological Information.	Physical hazards N/A						
Carbon monoxide (CO). Carbon diox Protective Equipment and Precaut Is in any fire, wear self-contained bro- rotective gear. IFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clear IP	ions for Firefighters eathing apparatus pressure-d Flammability 1 6. Accidental re Ensure adequate ventilatio See Section 12 for addition an Sweep up and shovel into 7. Handling a	Instability 0 Rease measures n. Use personal protective equival Ecological Information. suitable containers for disposa	Physical hazards N/A						
Carbon monoxide (CO). Carbon diox Protective Equipment and Precaut As in any fire, wear self-contained bro- protective gear. Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clear Jp	ions for Firefighters eathing apparatus pressure-d Flammability 1 6. Accidental re Ensure adequate ventilatio See Section 12 for addition an Sweep up and shovel into 7. Handling a	Instability 0 ease measures n. Use personal protective equival Ecological Information. suitable containers for disposa	Physical hazards N/A						
Carbon monoxide (CO). Carbon diox Protective Equipment and Precaut As in any fire, wear self-contained bro- protective gear. IFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clear Jp Handling	Flammability 1 6. Accidental re Ensure adequate ventilation See Section 12 for addition an Sweep up and shovel into 7. Handling a Avoid contact with skin and	Instability 0 Rease measures n. Use personal protective equival Ecological Information. suitable containers for disposa and storage deves. Do not breathe dust. Il-ventilated place. Keep contai	Physical hazards N/A						
Carbon monoxide (CO). Carbon diox Protective Equipment and Precaut As in any fire, wear self-contained bro- rotective gear. IFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clear Jp Iandling Storage.	Flammability 1 6. Accidental re Ensure adequate ventilation See Section 12 for addition In Sweep up and shovel into 7. Handling a Avoid contact with skin and Keep in a dry, cool and we Materials. Strong oxidizing	Instability 0 Rease measures n. Use personal protective equival Ecological Information. suitable containers for disposa and storage deves. Do not breathe dust. Il-ventilated place. Keep contai	Physical hazards N/A ipment as required.						
Carbon monoxide (CO). Carbon diox Protective Equipment and Precaut As in any fire, wear self-contained bro- rotective gear. IFPA Health 2 Personal Precautions Environmental Precautions Methods for Containment and Clear Jp Handling Storage. 8. E	Flammability 1 6. Accidental re Ensure adequate ventilation See Section 12 for addition m Sweep up and shovel into 7. Handling Avoid contact with skin and Keep in a dry, cool and we Materials. Strong oxidizing Xposure controls This product does not cont	Instability 0 Case measures n. Use personal protective equival al Ecological Information. suitable containers for disposa and storage deves. Do not breathe dust.	Physical hazards N/A ipment as required. I. ner tightly closed. Incompatible						
2 Personal Precautions Environmental Precautions Methods for Containment and Clea Jp Handling Storage.	Flammability 1 6. Accidental re Ensure adequate ventilation See Section 12 for addition In Sweep up and shovel into 7. Handling a Avoid contact with skin and Keep in a dry, cool and we Materials. Strong oxidizing Xposure controls This product does not cont limitsestablished by the reg	Instability 0 ease measures n. Use personal protective equival Ecological Information. suitable containers for disposa and storage deves. Do not breathe dust. Il-ventilated place. Keep contain agents.	Physical hazards N/A						

Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Powder Solid

	<u> </u>
Physical State	
Appearance	
Odor	
Odor Threshold	
рН	
Melting Point/Range	
Boiling Point/Range	
Flash Point	
Evaporation Rate	
Flammability (solid,gas)	
Flammability or explosive limits	
Upper	
Lower	
Vapor Pressure	
Vapor Density	
Specific Gravity	
Solubility	
Partition coefficient; n-octanol/water	
Autoignition Temperature	
Decomposition Temperature	
Viscosity	
Molecular Formula	
Molecular Weight	
-	

Light brown No information available No information available No information available 220 °C / 428 °F No information available No information available No data available No data available No data available No information available No information available

No data available No information available Not applicable No information available No information available No data available Not applicable Not applicable Not applicable C6 H4 O4 140.1

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Product	s Carbon monoxide (CO), Carbon dioxide (CO ₂)
Hazardous Polymerization	No information available.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information Component Information Toxicologically Synergistic

No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	No information available
------------	--------------------------

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico			
2,5-Cyclohexadiene-1, 4-dione, 2,5-dihydroxy-	615-94-1	Not listed	Not listed	Not listed	Not listed	Not listed			
		No information available							
Reproductive Effects		No information ava	ilable.						
Developmental Effects		No information ava	ilable.						
Teratogenicity		No information ava	ilable.						
STOT - single expos STOT - repeated exp	sure posure	None known None known							
Aspiration hazard		No information ava	ilable						
Symptoms / effects delayed	,both acute and	No information ava	ilable						
Endocrine Disrupto	r Information	No information ava	ailable						
Other Adverse Effect	cts	The toxicological p	roperties have not	been fully investig	jated.				
		12. Ecolo	ogical infor	mation					
<u>Ecotoxicity</u> Do not empty into dra	ains.								
Persistence and De	gradability	No information available							
Bioaccumulation/ A	ccumulation	No information available.							
Mobility		No information available.							
		13. Dispo	sal conside	erations					
Waste Disposal Methods		Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.							
		14. Tran	sport inforr	nation					
DOT UN-No Hazard Class Packing Group <u>TDG</u> UN-No Hazard Class Packing Group <u>IATA</u> UN-No		UN3143 6.1 III UN3143 6.1 III UN2811							
Proper Shipping	J Name	TOXIC SOLID, OR	GANIC, N.O.S.*						

Hazard Class Packing Group	6.1 III
IMDG/IMO UN-No	UN2811
Proper Shipping Name	Toxic solid, organic, n.o.s.
Hazard Class	6.1
Packing Group	III
	15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
2,5-Cyclohexadiene-1,4-dione, 2,5-dihydroxy-	615-94-1	Х	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710) X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
2,5-Cyclohexadiene-1,4-dione, 2,5-dihydroxy-	615-94-1	-	Х	210-454-3	-	-		Х	-	-

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable
California Proposition 65	This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations	Not applicable
U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant	N N N

U.S. Department of Homeland This product does not contain any DHS chemicals. Security

Other International Regulations

Mexico - Grade

No information available

Authorisation/Restrictions according to EU REACH

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
2,5-Cyclohexadiene-1,4-dione , 2,5-dihydroxy-	615-94-1	Not applicable	Not applicable	Not applicable	Not applicable
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	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
2,5-Cyclohexadiene-1,4-dione , 2,5-dihydroxy-	615-94-1	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information				
Prepared By	Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com			
Revision Date Print Date Revision Summary	24-Dec-2021 24-Dec-2021 This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).			

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS