

# SAFETY DATA SHEET

Revision Date 24-December-2021 **Revision Number** 5

1. Identification

**Product Name** Cyclododecanone

Cat No.: AC110970000; AC110970050; AC110971000; AC110975000

CAS-No

**Synonyms** No information available

**Recommended Use** Laboratory chemicals.

Food, drug, pesticide or biocidal product use. Uses advised against

Details of the supplier of the safety data sheet

Company

Manufacturer Importer/Distributor

Acros Organics Fisher Scientific Company Fisher Scientific One Reagent Lane One Reagent Lane 112 Colonnade Road. Fair Lawn, NJ 07410 Fair Lawn, NJ 07410 Ottawa, ON K2E 7L6, Tel: (201) 796-7100

Canada

Tel: 1-800-234-7437

**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

WHMIS 2015 Classification Not classified under the Hazardous Products Regulations (SOR/2015-17)

Based on available data, the classification criteria are not met

Label Elements

None required

Other Hazards

Toxic to aquatic life with long lasting effects

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Component CAS-No Weight %			
	Component	CAS-No	Weight %

Cyclododecanone 830-13-7 > 99

## 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. Get medical attention.

**Inhalation** Remove from exposure, lie down. Remove to fresh air. Get medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

Most important symptoms/effects Notes to Physician No information available.

Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

Unsuitable Extinguishing Media No information available

**Flash Point** 118 °C / 244.4 °F

**Method** - No information available

Autoignition Temperature 280 °C / 536 °F

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

## **Hazardous Combustion Products**

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

### **Protective Equipment and Precautions for Firefighters**

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

**NFPA** 

Health Flammability Instability Physical hazards
0 1 0 N/A

# 6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean** Sweep up and shovel into suitable containers for disposal. Do not let this chemical enter the environment.

# 7. Handling and storage

Handling Avoid contact with skin and eyes. Do not breathe dust. Do not ingest. If swallowed then

seek immediate medical assistance.

**Storage.** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Incompatible

Materials. Strong oxidizing agents. Strong bases. Reducing Agent.

# 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

### **Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

#### Personal protective equipment

**Eye 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.

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, 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. gloves with care avoiding skin contamination.

### **Respiratory Protection**

No protective equipment is needed under normal use conditions.

## **Environmental exposure controls**

Prevent product from entering drains. Do not allow material to contaminate ground water system.

#### <u>Hygiene Measures</u>

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.

# 9. Physical and chemical properties

Physical StateSolidAppearanceWhiteOdorStrong

Odor Threshold No information available

pH No information available

 Melting Point/Range
 59 - 61 °C / 138.2 - 141.8 °F

 Boiling Point/Range
 277 °C / 530.6 °F @ 760 mmHg

Flash Point 118 °C / 244.4 °F Evaporation Rate Not applicable

## Cyclododecanone

.9060

No information available

Flammability (solid, gas)

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor Pressure10 mmHg @ 131 °CVapor DensityNot applicable

Specific Gravity

SolubilityNo information availablePartition coefficient; n-octanol/waterNo data availableAutoignition Temperature280 °C / 536 °FDecomposition TemperatureNo information available

ViscosityNot applicableMolecular FormulaC12 H22 OMolecular Weight182.31

# 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, Strong bases, Reducing Agent

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

**Hazardous Polymerization** No information available.

Hazardous Reactions None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information**No acute toxicity information is available for this product

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cyclododecanone LD50 > 2500 mg/kg (Rat)		Not listed	Not listed

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
Ī	Cyclododecanone	830-13-7	Not listed				

Mutagenic Effects No information available

Reproductive Effects

No information available.

Developmental Effects

No information available.

**Teratogenicity** No information available.

STOT - single exposure None known

## Cyclododecanone

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and No information available

delayed

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

# 12. Ecological information

#### **Ecotoxicity**

The product contains following substances which are hazardous for the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Cyclododecanone	EC50: = 3.9 mg/L, 72h (Desmodesmus subspicatus)	Not listed	Not listed	Not listed

Persistence and Degradability Persistence is unlikely

**Bioaccumulation/ Accumulation**No information available.

**Mobility** . Is not likely mobile in the environment due its low water solubility.

Component	log Pow
Cyclododecanone	3.83

# 13. Disposal considerations

**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. Transport information

DOT

UN-No UN3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s.

Technical Name Cyclododecanone

Hazard Class 9
Packing Group III

TDG

UN-No UN3077

**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

IATA

UN-No UN307

**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

IMDG/IMO

UN-No UN3077

**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.

Hazard Class 9
Packing Group III

# 15. Regulatory information

#### International Inventories

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Cyclododecanone	830-13-7	-	X	X	ACTIVE	212-595-6	-	-

		•					•		
Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Cvclododecanone	830-13-7	Х	-	Х	Х	Х	Х	Х	X

#### Legend:

X - Listed '-' - Not Listed

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances **ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

#### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

### Other International Regulations

### 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)
Cyclododecanone	830-13-7	Listed	Not applicable	Not applicable	Not applicable
Component	CAS-No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)

Component	CAS-No	Seveso III Directive	Seveso III Directive	Rotterdam	Basel Convention
		(2012/18/EC) - (2012/18/EC) -		Convention (PIC)	(Hazardous Waste)
		<b>Qualifying Quantities</b>	Qualifying Quantities		
		for Major Accident   for Safety Report			
		Notification	Requirements		
Cyclododecanone	830-13-7	Not applicable	Not applicable	Not applicable	Not applicable

# 16. Other information

Regulatory Affairs **Prepared By** 

Thermo Fisher Scientific

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**Revision Date** 24-December-2021 24-December-2021 **Print Date** 

**Revision Summary** This document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

## **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**