

SAFETY DATA SHEET

Revision Date 29-Mar-2022 Revision Number 3

1. Identification

Product Name Diethyl acetylenedicarboxylate

Cat No. : A11719

CAS No 762-21-0

Synonyms No information available

Recommended Use Laboratory chemicals.

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

Details of the supplier of the safety data sheet

Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

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

Skin Corrosion/Irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1
Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Danger

Hazard Statements

May cause respiratory irritation Causes severe skin burns and eve damage



Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

Use only outdoors or in a well-ventilated area

Response

Immediately call a POISON CENTER or doctor/physician

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Storage

Store locked up

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

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 %	
	Diethyl 2-butynedioate	762-21-0	97	

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Call a physician

immediately.

Inhalation If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim

> ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician

immediately. Remove from exposure, lie down.

Ingestion Do NOT induce vomiting. Clean mouth with water. Never give anything by mouth to an

unconscious person. Call a physician immediately.

Most important symptoms and

effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue

and danger of perforation

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Carbon dioxide (CO₂). Dry chemical. Chemical foam. CO₂, dry chemical, dry sand,

alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point 94 °C / 201.2 °F

Method - No information available

Autoignition Temperature

Explosion Limits

No information available

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

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

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

NFPA

Health	Flammability	Instability	Physical hazards
3	0	0	N/A

Accidental release measures

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

personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. **Up**

	7. Handling and storage
Handling	Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance.
Storage.	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Protect from direct sunlight. Keep refrigerated. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

Incompatible Materials. Acids. 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.

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations **Engineering Measures**

and safety showers are close to the workstation location.

Personal Protective Equipment

Wear appropriate protective eyeglasses or chemical safety goggles as described by **Eye/face Protection**

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Wear appropriate protective gloves and clothing to prevent skin exposure. Skin and body protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard **Respiratory Protection**

> EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures**

9. Physical and chemical properties

Physical State Liquid **Appearance** Brown Odorless Odor

Odor Threshold No information available pН No information available

Melting Point/Range 1 - 3 °C / 33.8 - 37.4 °F

107 - 110 °C / 224.6 - 230 °F @ 11 mmHg **Boiling Point/Range**

94 °C / 201.2 °F **Flash Point** No information available **Evaporation Rate** Not applicable

Flammability (solid, gas) Flammability or explosive limits

No data available Upper Lower No data available

Vapor Pressure No information available

Vapor Density 5.87 **Specific Gravity** 1.060

Solubility No information available Partition coefficient; n-octanol/water No data available **Autoignition Temperature** No information available

Decomposition Temperature No information available Viscosity No information available

Molecular Formula C8 H10 O4

Molecular Weight 170.17

10. Stability and reactivity

Reactive Hazard None known, based on information available

Light sensitive. Stability

Exposure to light. Incompatible products. **Conditions to Avoid**

Diethyl acetylenedicarboxylate

Incompatible Materials Acids, 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 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

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

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Diethyl 2-butynedioate	762-21-0	Not listed				

No information available **Mutagenic Effects**

Reproductive Effects No information available.

Developmental Effects No information available.

No information available. **Teratogenicity**

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated: Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation

Endocrine Disruptor Information No information available

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

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No information available No information available. **Bioaccumulation/ Accumulation**

Mobility No information available.

13. Disposal considerations

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods**

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 UN3265

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Technical Name Diethyl 2-butynedioate

Hazard Class 8
Packing Group ||

<u>TDG</u>

UN-No UN3265

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class 8
Packing Group ||

IATA

UN-No UN3265

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class 8
Packing Group ||

IMDG/IMO

UN-No UN3265

Proper Shipping Name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class 8
Packing Group ||

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Diethyl 2-butynedioate	762-21-0	=	-	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL).

	Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Dieth	yl 2-butynedioate	762-21-0	-	-	212-095-8	-	-		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

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Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

This product does not contain any Proposition 65 chemicals. **California Proposition 65**

U.S. State Right-to-Know

Regulations

Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): Ν **DOT Marine Pollutant** Ν **DOT Severe Marine Pollutant** Ν

U.S. Department of Homeland

Component

Diethyl 2-butynedioate

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH Not applicable

CAS No

762-21-0

	Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Ī	Diethyl 2-butynedioate	762-21-0	-	-	-

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

·			Pollutant	Potential	Hazardous Substances (RoHS)
Diethyl 2-butynedioate	762-21-0	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)

Persistent Organic

Not applicable

Ozone Depletion

Not applicable

Restriction of

Not applicable

OECD HPV

Not applicable

16. Other information

Prepared By Health, Safety and Environmental Department

Email: tech@alfa.com

www.alfa.com

29-Mar-2022 **Revision Date** 29-Mar-2022 **Print Date**

SDS authoring systems update, replaces ChemGes SDS No. 762-21-0/2. **Revision Summary**

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