

Material Safety Data Sheet

Dimethyl acetyl succinate

Section 1 - Product Identification

Product name: Dimethyl acetyl succinate
Product Number: AC150730000; AC150730050; AC150731000; AC150735000
Brand: Fisher Scientific
Supplier: Fisher Scientific
One Reagent Lane Fair Lawn, NJ 07410

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Emergency Telephone Number
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Section 2 – Composition/Information on Ingredients

Synonyms : Methyl succinate
Formula : $C_8H_{12}O_5$
Molecular Weight : 188.179 g/mol

Component	Classification	Concentration
Dimethyl acetyl succinate		
CAS-No. 106-65-0	-	>95 %

Section 3 – Hazards Identification

Classification

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

Label Elements

Signal Word: Warning

Hazard Statements: Combustible liquid

Precautionary Statements

Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking Wear protective gloves/protective clothing/eye protection/face protection

Fire: In case of fire: Use CO₂, dry chemical, or foam for extinction

Storage: Store in a well-ventilated place. Keep cool Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC): None identified

Section 4 – First-Aid Measures

General Advice

If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention. If skin irritation persists, call a physician. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Inhalation

Remove from exposure, lie down. Move to fresh air. If not breathing, give artificial respiration. Obtain medical attention.

Immediate medical attention is not required. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapors or decomposition products.

Ingestion

Clean mouth with water. Get medical attention. Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician.

Most important symptoms and effects Breathing difficulties.

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Notes to Physician: Treat symptomatically

Section 5 – Fire Fighting Measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Dry chemical. Carbon dioxide (CO₂). Water spray. alcohol-resistant foam. Cool closed containers exposed to fire with water spray.

Unsuitable Extinguishing Media: No information available

Flash Point: 85 °C / 185 °F

Method - No information available

Autoignition Temperature: 365 °C / 689 °F

Explosion Limits

Upper: 8.50%

Lower: 1.00%

Sensitivity to Mechanical Impact: No information available

Sensitivity to Static Discharge: No information available

Specific Hazards Arising from the Chemical: Combustible material. Keep product and empty container away from heat and sources of ignition. Risk of ignition. Containers may explode when heated.

Hazardous Combustion Products: Thermal decomposition can lead to release of irritating gases and vapors 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.

Section 6 – Accidental Release Measures

Personal Precautions

Use personal protective equipment. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges. Environmental Precautions

See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods for Containment and Clean Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition.

Section 7 – Handling and Storage

Handling

Avoid contact with skin and eyes. Avoid contact with clothing. Remove and wash contaminated clothing before re-use. Avoid breathing vapors or mists. Do not ingest. Wash thoroughly after handling. Pay attention to flashback. Take precautionary measures against static discharges. Contents under pressure. No information available. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Keep away from heat and sources of ignition. Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place

Section 8 – Exposure Controls/Personal Protection

Exposure Guidelines

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

Engineering Measures

None under normal use conditions. Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Eye/face Protection: Tightly fitting safety goggles.

Skin and body protection: Wear protective gloves/clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. Impervious gloves.

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

Hygiene Measures: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

Section 9 – Physical and Chemical Properties

Physical State: Liquid

Appearance: Colorless

Odor: aromatic

Odor Threshold: No information available

pH: No information available

Melting Point/Range: 18 - 19 °C / 64.4 - 66.2 °F

Boiling Point/Range: 200 °C / 392 °F

Flash Point: 85 °C / 185 °F

Evaporation Rate: No information available

Flammability (solid,gas): Not applicable

Flammability or explosive limits:

Upper 8.50%

Lower 1.00%

Vapor Pressure: 0.3 mmHg @ 20 °C

Vapor Density: 5.04

Specific Gravity: 1.110

Solubility: Soluble in water

Partition coefficient; n-octanol/water: No data available

Autoignition Temperature: 365 °C / 689 °F

Decomposition Temperature: No information available

Viscosity: No information available

Molecular Formula: C6 H10 O4

Molecular Weight: 146.14

Section 10 – Stability and Reactivity

Reactive Hazard: None known, based on information available

Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible products. Heating in air. Keep away from open flames, hot surfaces and sources of ignition. Incompatible Materials Acids, Bases, Reducing agents

Hazardous Decomposition Products: Thermal decomposition can lead to release of irritating gases and vapors, Carbon monoxide (CO), Carbon dioxide (CO₂) Hazardous Polymerization: No information available.

Hazardous Reactions: None under normal processing.

Section 11 – Toxicological Information

Acute Toxicity

Product Information: Product does not present an acute toxicity hazard based on known or supplied information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dimethyl succinate	LD50 > 5 g/kg (Rat)	LD50 > 5 g/kg (Rabbit)	Not listed

Toxicologically Synergistic Product: No information available

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.

Mutagenic Effects: No information available

Reproductive Effects: No information available.

Developmental Effects: No information available.

Teratogenicity: No information available.

STOT - single exposure: None known

STOT - repeated exposure: None known

Aspiration hazard: No information available

Symptoms / effects, both acute and delayed: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information: No information available

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

Section 12 – Ecological Information

Ecotoxicity

Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Dimethyl succinate	Not listed	LC50: 50 - 100 mg/L, 96h static (Brachydanio rerio)	Not listed	Not listed

Persistence and Degradability: Persistence is unlikely

Bioaccumulation/ Accumulation: No information available.

Mobility: Will likely be mobile in the environment due to its water solubility

Section 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

Section 14 – Transport Information

DOT: Not regulated

TDG: Not regulated

IATA: Not regulated

IMDG/IMO: Not regulated

Section 15 – Regulatory Information

All of the components in the product are on the following Inventory lists: X = listed

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Dimethyl succinate	X	X	-	203-419-9	-		X	X	X	X	X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b)

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): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Slight risk, Grade 1

Section 16 : Additional Information

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Creation Date 02-Nov-2011

Revision Date 18-Jan-2018

Print Date 18-Jan-2018

Revision Summary: 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