

### SAFETY DATA SHEET

#### Nonanoic acid, methyl ester

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification	
Product identifier	
Product name	Nonanoic acid, methyl ester
Product number	W1307
Synonyms; trade names	Methyl nonanoate Methyl pelargonate Nonanoate, methyl Pelargonic acid methyl ester METHYL PELARGONATE
CAS number	1731-84-6
Recommended use of the chemical and restrictions on use	
Application	Laboratory chemicals, Manufacture of substances.
Uses advised against	No specific uses advised against are identified.
Details of the supplier of the safe	ty data sheet
Supplier	Synerzine 5340 Highway 42 Ellenwood, GA 30294 (404) 524-6744 info@synerzine.com
Contact Person	James Elliott
Emergency telephone number	
Emergency telephone	INFOTRAC 1-800-535-5053 (Reference Contract # 102471)
2. Hazard(s) identification	
Classification of the substance or	mixture
Physical hazards	Flam. Liq. 4 - H227
Health hazards	Not Classified
Environmental hazards	Not Classified
Label elements	
Signal word	Warning
Hazard statements	H227 Combustible liquid.
Precautionary statements	P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/ container in accordance with national regulations.
Other hazards	

#### Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

3. Composition/information on ingredients

#### Substances

Product name	Nonanoic acid, methyl ester
CAS number	1731-84-6
Chemical formula	C10H20O2
4. First-aid measures	
Description of first aid measures	
General information	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Ingestion	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin Contact	Remove affected person from source of contamination. Rinse immediately with plenty of water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.
Most important symptoms and effe	ects, both acute and delayed
General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.
Indication of immediate medical at	ttention and special treatment needed
Notes for the doctor	Treat symptomatically.
Specific treatments	No special treatment required.
5. Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Special hazards arising from the s	ubstance or mixture
Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
Advice for firefighters	
Protective actions during firefighting	Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak.

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.
6. Accidental release measures	
Personal precautions, protective e	equipment and emergency procedures
Personal precautions	No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.
Environmental precautions	
Environmental precautions	Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).
Methods and material for containr	nent and cleaning up
Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labeled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
7. Handling and storage	
Precautions for safe handling	
Usage precautions	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists.
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.
Conditions for safe storage, includ	ling any incompatibilities
Storage precautions	Store away from incompatible materials (see Section 10). Store in accordance with local regulations.
Storage class	Unspecified storage.
Specific end uses(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.
8. Exposure controls/Personal pr	otection
Ingredient comments	No exposure limits known for ingredient(s).
Exposure controls	
Protective equipment	



Appropriate engineering controls	Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. The following protection should be worn: Chemical splash goggles.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Not regarded as dangerous for the environment.

#### 9. Physical and chemical properties

Information on basic physical and	chemical properties
Appearance	Clear liquid.
Color	Colorless.
Odor	Below 10Ppm Coconut-like Odor Flour Taste Sweet Coconut-like Wine
Odor threshold	Not available.
pH	Not available.
Melting point	Not available.
Initial boiling point and range	214°C
Flash point	87°C/189°F Method: Closed cup.
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	Not available.
Vapor density	xxx.x - (Air - 1.0)
Relative density	Not available.
Solubility(ies)	Not available.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.

Oxidizing properties	Not available.
Molecular weight	xxx.xx g/mol
10. Stability and reactivity	
Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
11. Toxicological information	
Information on toxicological effects Acute toxicity - oral Summary	s Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Summary	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Summary	Based on available data the classification criteria are not met.
Skin corrosion/irritation Summary	Based on available data the classification criteria are not met.
Serious eye damage/irritation Summary	Based on available data the classification criteria are not met.
Respiratory sensitization Summary	Based on available data the classification criteria are not met.
Skin sensitization Summary	Based on available data the classification criteria are not met.
Germ cell mutagenicity Summary	Based on available data the classification criteria are not met.
Carcinogenicity Summary	Based on available data the classification criteria are not met.
Reproductive toxicity Summary	Based on available data the classification criteria are not met.
Specific target organ toxicity - sing Summary	gle exposure Based on available data the classification criteria are not met.
Specific target organ toxicity - repe Summary	eated exposure Based on available data the classification criteria are not met.
Aspiration hazard	

Summary

Based on available data the classification criteria are not met.

General information	No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin Contact	Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.
12. Ecological information	
Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
Acute aquatic toxicity Summary	Based on available data the classification criteria are not met.
Chronic aquatic toxicity Summary	Based on available data the classification criteria are not met.
Persistence and degradability Persistence and degradability	The degradability of the product is not known.
Bioaccumulative potential	
Bio-Accumulative Potential	No data available on bioaccumulation.
Partition coefficient	Not available.
Mobility in soil	
Mobility	No data available.
Other adverse effects	
Other adverse effects	None known.
13. Disposal considerations	
Waste treatment methods	
General information	The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.
Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.
14. Transport information	
General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).
UN Number	
UN No. (International)	Not applicable.
UN No. (DOT)	NA 1993

UN proper shipping name	
Proper shipping name (International)	Not applicable.
Proper shipping name (DOT)	COMBUSTIBLE LIQUID, N.O.S. (User to define)
Transport hazard class(es)	
Transport Labels (International)	No transport warning sign required.
DOT hazard class	None
DOT hazard label	None
Packing group	
Packing group (International)	Not applicable.
DOT packing group	III
Environmental hazards	
Environmentally Hazardous Subst <i>No</i> .	ance
Special precautions for user	
Not applicable.	
Transport in bulk according to Annex II of MARPOL 73/78 and	Not applicable.
the IBC Code	
the IBC Code 15. Regulatory information	
	OSHA Hazard Communication Standard 29 CFR §1910.1200
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End of Safety Data Sheet

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