

1. Identification of the substance/mixture and of the company/undertaking	
1.1 Product identifier	
Name of the substance:	ME-1214 METHYLESTER
Identification number:	67762-40-7
Registration number:	01-2119491160-46-0001
Synonyms:	Methyl Laurate-Myristate
EC number:	267-018-0
Product code:	ME-200-040
Issue date:	14-5-2015
Version number:	6
Revision date:	14-5-2015
Supersedes date:	14-5-2015
1.2. Relevant identified uses of the substance or mixture and uses advised against	
Identified uses:	Oil candle for illuminating purpose
Uses advised against:	None known.
1.3. Details of the supplier of the safety data sheet	
Manufacturer/Supplier:	
PH Agro ApS Baelumvej 25 955 Terndrup Denmark	
Further information obtainable from:	Php@loutbrogaard.dk
Emergency telephone number: +(45) 82 12 12 12 Poison Hotline (DK), Bispebjerg Hospital (open 24 hours)	

2 Hazards identification	
2.1. Classification of the substance or mixture	
The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.	
Classification according to Directive 67/548/EEC or Directive 1999/45/EC:	Not applicable.
Classification according to Regulation (EC) No 1272/2008 <i>The full text for all R-phases is displayed in section 16</i>	The substance is not classified according to the CLP regulation
2.2. Label elements	
Labelling according to Regulation (EC) No 1272/2008:	Not applicable.
Hazard pictograms:	Not applicable
Signal word:	Not applicable
Hazard statement:	Not applicable
2.3 Other Hazards	

Result of PBT and vPvB assessment		
PBT:	Not applicable	
vPvB:	Not applicable	

3 Composition/information on ingredients				
3.1. Substance				
Chemical name		%	CAS-No. / EC No.	
Methyl Laurate		70-100 %	111-82-0 203-911-3	N: R50 Aquatic Acute 1, H400; Aquatic chronic 2, H411
Methyl Decanoate		≤ 2 %	110-42-9 203-766-6	Aquatic chronic 2, H411
Additional information: For the wording of the listed risk phrases refer to section 16.				
Classification:		DSD:		
		CLP:		
CLP:	Regulation No. 1272/2008			
DSD:	Directive 67/548/EEC			
PBT:	persistent, bio accumulative and toxic substance			
vPvB:	very persistent and very bio accumulative substance			
#:	This substance has been assigned Community workplace exposure			
M:	M-factor			

4 First aid measures	
General information:	If you feel unwell, seek medical advice (show the label where possible)
4.1. Description of first aid measures	
inhalation:	Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Skin contact:	Wash the skin immediately with soap and water. Remove contaminated clothing. Get medical attention if irritation develops and persists. Wash clothing separately before reuse.
Eye contact:	Eye contact Flush thoroughly with water for at least 15 minutes. Get medical assistance.
Ingestion:	Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. Get medical attention.
4.2. Most important symptoms and effects, both acute and delayed	None known.
4.3. Indication of any immediate medical attention and special treatment needed	Not available.

5 Firefighting measures	
General fire hazards:	Not available.
5.1. Extinguishing media:	
Suitable extinguishing media	Foam. Carbon dioxide (CO2). Dry chemicals.
Unsuitable extinguishing Media:	Water spray may be ineffective on fire.
5.2. Special hazards arising from the substance or mixture:	Combustion causes toxic fumes. Carbon monoxide and carbon dioxide.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective clothing.
Special fire fighting procedures	Cool containers with flooding quantities of water until well after fire is out.

6 Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	Wear suitable protective clothing, gloves and eye/face protection.
For emergency responders:	Wear appropriate protective equipment and clothing during clean-up. If vapor or fog is generated use an appropriate NIOSH/MSHA approved respirator
6.2. Environmental precautions	Dike flow of spilled material using soil or sandbags to minimize contamination of drains, surface and ground waters.
6.3. Methods and material for containment and cleaning up:	Ventilate the area. Eliminate sources of ignition. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
6.4. Reference to other sections	For personal protection, see section 8. For waste disposal, see section 13.

7 Handling and storage	
7.1. Precautions for safe handling:	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practices. Avoid contact with eyes, skin, and clothing. Keep away from sources of ignition.
7.2. Conditions for safe storage, including any incompatibilities	Can be stored in most common storage vessels including carbon steel, aluminum, fiberglass and stainless steel. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames and high temperatures.

7.3. Specific end use(s):	Not available.
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8 Exposure controls/personal protection	
8.1. Control parameters	
Occupational exposure limits:	No exposure limits noted for ingredient(s).
Biological limit values:	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Not available.
8.2. Exposure controls	
Appropriate engineering controls:	Local exhaust is recommended. Mechanical ventilation may be required.
Individual protection measures, such as personal protective equipment	
General information:	Observe good industrial hygiene practices. Avoid breathing (heated) vapors. Avoid contact with eyes. Avoid contact with skin.
Eye/face protection:	Use safety goggles and face shield in case of splash risk.
Skin protection:	
Hand protection:	Nitrile gloves are recommended.
Other:	Wear suitable protective clothing. If prolonged or repeated contact is likely, chemical resistant clothing is recommended.
Respiratory protection:	No protection is ordinarily required under normal conditions of use and with adequate ventilation. When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided
Thermal hazards:	Not available.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practices.
Environmental exposure controls:	See Sections 6.2, 6.3 and 13.

9 Physical and chemical properties	
9.1. Information on basic physical and chemical properties	
Appearance:	
Physical state:	Liquid
Form:	Liquid
Colour:	Clear
Odour:	Musty.
Odour threshold:	Not available.
Melting point/freezing point:	ca. - 4 °C
Boiling Point/Boiling range:	ca. 262 °C
Flash point:	ca. 141 °C (Pensky-Martens Closed Cup)

Flammability (solid, gaseous):	Not applicable.
Vapour pressure:	< 0,55 Pa at 25°C
Vapour density:	Not applicable.
Relative density:	867,1 kg/m ³ at 20°C
Solubility(ies):	< 0,06 mg/l at 25°C
Partition coefficient (n-octanol/water):	5,4 -6,4
Auto-ignition temperature:	220 °C ca. at 1013 hPa
Explosive properties:	Not available
Oxidizing properties:	Not available.
9.2. Other information	
Dissociation constant:	Not applicable
Dynamic viscosity:	3,65 mm ² /s at 20°C

10 Stability and reactivity

10.1. Reactivity	Oxidizing agents. Strong bases.
10.2. Chemical stability:	Stable at normal conditions.
10.3. Possibility of hazardous reactions:	Hazardous polymerisation does not occur.
10.4. Conditions to avoid:	Reacts with strong base to produce methanol
10.5. Incompatible materials:	Oxidizing agents. Strong bases.
10.6. Hazardous decomposition products:	Carbon monoxide and carbon dioxide..

11 Toxicological information

General information:	Based on available data, the classification criteria are not met.	
Information on likely routes of exposure		
Ingestion:	Based on available data, the classification criteria are not met.	
Inhalation:	Based on available data, the classification criteria are not met.	
Skin contact:	Based on available data, the classification criteria are not met.	
Eye contact:	Based on available data, the classification criteria are not met.	
Symptoms:	Not available.	
11.1. Information on toxicological effects		
Acute toxicity:	Based on available data, the classification criteria are not met.	
-LD/LC50 values relevant for classification:		
Oral LD50 > 2000 mg/kg bw (rat) (OECD 401, RA Methyl Laurate)		
Reproductive toxicity:	Based on available data, the classification criteria are not met.	
Carcinogenicity:	No further relevant information available.	
Mutagenicity:	Negative	

<u>12 Ecological information</u>	
Aquatic toxicity:	
EC50 (7d)	> 100 mh/L (daphnia Magana) (Loading rate WFS, OECD 211, FAME C12-14)
EL50 (72h)	≥ 100 mg/L (alga) (Loading rate WSF, OECD 201, FAME C12-14)
NOERL (21d)	≥ 100 mh/L (daphnia Magana) (Loading rate WFS, OECD 211, FAME C12-14)
12.2. Persistence and degradability	No further relevant information available
12.3. Bioaccumulative potential	No further relevant information available
12.4. Mobility in soil	No further relevant information available
Additional ecological information:	
General note:	
WGK Registration 834 for CAS No. 67762-40-7. Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product of large quantities of it to reach ground water, water course or sewage system.	
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	Not known

<u>13 Disposal considerations</u>	
13.1. Waste treatment methods	
Residual waste:	Dispose of in accordance with local regulations.
Contaminated packaging:	Dispose in accordance with all applicable regulations.
EU waste code:	Not available.
Disposal methods/information:	Dispose of waste and residues in accordance with local authority requirements. Do not discharge into drains, water courses or onto the ground.

<u>14 Transport information</u>	
ADR	
14.1. UN number	
DOT, ADR, AND, IMDG, IATA	Not Regulated
14.2. UN proper shipping name	
DOT, ADR, AND, IMDG, IATA	Not Regulated
14.3. Transport hazard class(es) Subsidiary class(es)	
DOT, ADR, AND, IMDG, IATA	Not Regulated
14.4. Packing group	
DOT, ADR, AND, IMDG, IATA	Not Regulated
14.5. Environmental hazards	
Marine pollutant	No

14.6. Special precautions for user	Not applicable
14.7. Transport in bulk Not applicable. according to Annex II of MARPOL 73/78 and the IBC Code	Name: Fatty acid methyl esters (m) Pollution category: Y Ship type: 2

<u>15 Regulatory information</u>	
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations	
<p>Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I Not listed.</p> <p>Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II Not listed.</p> <p>Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended Not listed.</p> <p>Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended Not listed.</p> <p>Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended Not listed.</p> <p>Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended Not listed.</p> <p>Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.</p> <p>Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry Not listed.</p> <p>Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA Not listed.</p> <p>Authorisations</p> <p>Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation Not listed.</p> <p>Restrictions on use</p> <p>Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.</p> <p>Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work Not regulated.</p> <p>Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding Not regulated.</p>	
Other regulations	The product is classified and labelled in accordance with EC directives or respective

	national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.
National regulations	Not available.
15.2. Chemical safety assessment	Chemical Safety Assessment has been carried out.
Inventory status	<p>Country(s) or region Inventory name On inventory (yes/no)* Australia Australian Inventory of Chemical Substances (AICS) Yes Canada Domestic Substances List (DSL) Yes China Inventory of Existing Chemical Substances in China (IECSC) Yes Country(s) or region Inventory name On inventory (yes/no)* Europe European Inventory of Existing Commercial Chemical Substances (EINECS) Yes Europe European List of Notified Chemical Substances (ELINCS) No Japan Inventory of Existing and New Chemical Substances (ENCS) Yes Korea Existing Chemicals List (ECL) Yes New Zealand New Zealand Inventory Yes Philippines Philippine Inventory of Chemicals and Chemical Substances Yes (PICCS) Switzerland Switzerland FOPH No United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes *A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)</p>

16 Other information	
Relevant phrases:	<p>H400: Very toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects. R50 Very toxic to aquatic organisms.</p>
Disclaimer	<p>This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.</p>