Material Safety Data Sheet

Rape Methyl Ester

Date: 15-nov-2016
Revision no: 04 – replaces 04-apr-2014

1. Identification of the substance and Supplier.

Product:

Trade name:	**Biodiesel**
Product description :	**Rape Methyl Ester**
CAS:	**67762-38-3**
EINECS:	**267-015-4**
REACH	**01-2119471664-32-0101**

Company identification

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Field of application:
Bio diesel Fuel

In emergency - call 112

2. Hazards identification:

Classification of the substance
No classification according to Regulations EC no 1272/2008 (CLP) and Directive 67/548/EEC.

Label
Not relevant – product is not classified as hazardous.

3. Composition/information on ingredients:

Name	CAS no.:	EINECS	Weight %	Symbol	R-phrases
Rape Methyl Ester	67762-38-3	267-015-4	>96.5%	-	-

Mixture: Product is not a mixture.

Product is not classified as hazardous.

4. First Aid measure:

Inhalation:	Remove casualty from exposure (to fresh air), ensuring one's own safety while doing so. Seek medical attention if symptoms persist.
Ingestion:	Do not induce vomiting. Wash out mouth with water. If conscious, give one or two glasses of water to drink. If gastro-intestinal symptoms develop, consult medical personnel. Never give anything by mouth to an unconscious person.
Eyes:	Flush eyes immediately with large amounts of water for at least 15 minutes. Keep eyelids apart. Seek medical attention if symptoms persist.
Skin:	Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin.
Important symptoms	Vapors produced by heating or finely misted materials may irritate the mucous membranes and cause dizziness and nausea.

5. Fire-fighting measures:

Extinguishing media:

Appropriate	Dry chemical powder, alcohol resistant foam, C02, or sand. water spray (fog) when other extinguishing medias are not available
Unsuitable	Water may splash the burning liquid and spread the fire.
Special hazards:	Biodiesel soaked rags or spill absorbents can cause spontaneous combustion if stored near combustibles and not handled properly.
In case of fire	In combustion emits toxic fumes of carbon dioxide and carbon monoxide (CO_2, CO).
Protective equipment	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. Accidental release measures:

Personal precautions	Remove all sources of ignition. Use personal protective equipment.
Environmental	Do not discharge into drains or rivers. Contact the local authorities in case of pollution.
Methods for cleaning	Pick up small spills with absorbent materials and dispose of properly to avoid spontaneous combustion. Contain any larger spillage using bunding. Recover large spills for salvage or disposal. Wash hard surfaces with safety solvent or detergent to remove remaining oil film. The greasy nature of the product can result in a slippery surface.

7. Handling and Storage:

Handling:	Avoid direct contact with skin and eyes. Do not breathe vapour. Do not eat, drink or smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.
d Storage:	Keep away from sources of ignition. Keep container tightly closed. Keep away for oxidizing agents and excessive heat.

8. Exposure controls/personal protection:

Control parameters

Control parameters	Keep personal exposure levels below DNELs
Monitoring procedure	Not required.

No applicable occupational exposure limit values and/or biological limit values

Derived No Effect Levels (DNELs)

Oral	Long term syst.	5 mg/kg bodyweight/day (general public)
Dermal	Long term syst.	10 mg/kg bodyweight/day (general public) 5 mg/kg bodyweight/day (workers)
Inhalative	Long term syst.	23 mg/m^3 (general public) 6,96 mg/m^3 (workers)

8. Exposure controls/personal protection…continued:

Predicted No Effect Concentration

Sewage treatment	520 mg/l
Water Fresh water	2.504 mg/l
Water Marine water	0.2504 mg/l
Water intermittent	25.04 mg/l

Exposure controls
Personal protective equipment

General	The usual precautionary measures are to be adhered to when handling chemicals. See handling under 7.
Respiratory protection	Wear approved respiratory protective devices when aerosol or mist is formed (Filter A/P2)
Hand protection	Wear suitable gloves. Gloves should be chosen in consultation with the glove supplier, with information on effects from other substances in the work place. Rubber or PVC gloves is recommended.
Eye protection	Wear suitable safety goggles or face shield when risk for mists or splashing.
Body protection	Wear normal work clothes.

Environmental exposure controls
Do not discharge into drains or rivers. Contact the local authorities in case of pollution.

Risk management measures
Exposure scenarios are not available since products is not classified as dangerous for health and environment according to CLP regulation.

9. Physical and chemical properties:

Physical state	Liquid
Colour	yellowish
Odour	Characteristic
Odour threshold	Not applicable
pH-value	No relevant
Melting point	< 0 °C
Boiling point	348 °C at 1.013 hPa (1 atm.)
Flash point [c.c.]	>160 °C
Flammability (solid,gas)	Not flammable.
Vapour pressure	4.2 mbar at 25 °C
Density at 15 °C	0.88 kg/m3
Water solubility	not soluble
Partition coefficient: (n-octanol/water)	Log Kow = 6.2 at 25 °C
Viscosity, dynamic	4,4 – 4,5 mm2/s at 40 °C
Auto-ignition temperature	261 +/- 5 °C

10. Stability and reactivity:

Reactivity	The product is stable.
Possibility of Hazardous reactions	Reacts with strong oxidizing agents
Chemical stability	The product is stable at normal conditions
Conditions to avoid	Keep away from ignition sources and heat.
Materials to avoid	Strong oxidizing agents Strong bases
Hazardous Decompositions	Carbon monoxide, carbon dioxide Thick smoke. Irritant gases/vapours

11. Toxicological information:

Acute oral toxicity	LD 50 rat	Dose: > 5000 mg/kg
Acute Dermal toxicity	LD 50 rabbit	Dose: > 2000 mg/kg
Skin irritation	slightly irritation	
Eye irritation	No irritation	
Sensitisation	No skin sensitisation	
Repeated dose toxicity	oral: >1000 mg/kg body weight pr day (rat)	
Carcinogenicity	Not considered being carcinogen	
Mutagenicity In vitro	Not considered being mutagenic Not mutagenic in bacterial reverse mutation assay Not clastogenic. Mammalian Chromosomal Aberration Test Does not induce chromosomal damage. Mammalian Bone Marrow Chromosomal Aberration Test	
Reproductive	No impairment of fertility has been observed No embryotoxic or teratogenic effects have been observed. [Oral: >1000 mg/kg body weight/day (rat)]	

12. Ecological information

Toxicity

Aquatic toxicity	the product has no acute effect at concentrations far exceeding its water solubility and thus considered not to be classified as hazardous to aquatic organisms.
Fish	LC 50 Dose: > 100000 mg/l
Daphnia and other aquatic invertebrates	EC 50 (48 hours) Daphnia magna Dose: 2504 mg/l
Algae	EC50 (72 h): app. 73729 mg/L test mat. (nominal) based on: growth rate.

12. Ecological information…continued

Persistence and degradability

Degradability	the product is readily biodegradable
Bioaccumulative	Not expected
Mobility in soil	The product is very poorly soluble in water and readily biodegradable, indicating a very low mobility in soil.
PBT- og vPvB-assessment	No PBT No PvB
Other adverse effects	The product is considered stable in the environmental range of pH.

13. Disposal considerations:

Waste treatment

Product	Disposal must be made according with National and Local regulations. Incineration is recommended.	
Uncleaned packaging	Same as product	
European Waste Catalogue	16.03.06	Organic wastes other than those mentioned in 16.03.05

14. Transport information:

Not classified as hazardous goods

15. Regulatory information:

Labelling	Not classified as hazardous.
Safety Assessment	A Chemical Safety Assessment has been carried out for the substance. The substance is not classified as hazardous and is not a PBT/vPvB.

16. Other information:

This Safety Data Sheet is based upon our present knowledge and experience and it is intended to be understood as a description for safe handling of the product regarding to health and environmental aspects and is not a guarantee for the properties of the product.
It is always the responsibility of the user to comply with national legislations.