1 Identification of the Substance / Mixture and the Supplier

1.1 Productidentifier

Product- / Tradename:	**Fatty acid from Rapeseed**
Product Shape:	**Substance**

1.2 Relevant identified usages of the substance or mixture and dissuaded usages

1.2.1 Relevant identified usages

Animal Feed, raw material for technical use.

1.2.2 Dissuaded usages

Strong thermal heating. Possible formation of Acrolein above a temperature of 290° C.

1.3 Details of the supplier that provides the safety data sheet

Supplier / Manufacturer:	**O. & L. Sels GmbH & Co. KG**
Street:	**Düsseldorfer Straße 99 – 101**
Country code/zip code/city:	**D – 41460 Neuss**
Contact für technical information:	**Quality Management / Laboratory**
Phone:	**+49 2131 / 2799 - 0**
Telefax:	**+49 2131 / 275432**
E-Mail:	**QM@sels.de**

1.4 Emergency Number

Universitätsklinikum Bonn	**+49 228 / 19240**

2 Hazards Identification

2.1 Classification of the substance or mixture

Not necessary. Not a dangerous product according to regulation (EG) no. 1272/2008.

2.2 Labeling elements

Labelling elements due to VO (EG) No. 1272/2008:	**none**
Pictogram:	**none**
Signalword:	**none**
Hazard determining components for labelling:	**none**

2.3 Other hazards

Results of the PBT- and vPvB-assessment:

- PBT:	**Not applicable.**
- vPvB:	**Not applicable.**

3 Composition / Information on Ingredients

3.1 Substances

Main component of the substance:	**Fatty acids** **(Rapeseed oil)**
Chemical Composition:	Saturated and not saturated fatty acids (**Triglycerides of various fatty acids (predominant oleic acid))**

4 First Aid Measures

4.1 Description of first aid measures

General instructions:	**No particular substance-specific measures required.**

4.2 Most important acute and delayed symptoms and effects

No further relevant information available.

4.3 Indications for any immediate medical attention or special treatment

No further relevant information available.

5 Fire-Fighting Measures

5.1 Extinguishants

Suitable extinguishants:	F**oam, carbon dioxide, extinguishing powder, sand**
Unsuitable extinguishants due to safety reasons:	**Water**

5.2 Specific hazards caused by the substance or mixture

Special hazards caused by the mixture or its products of combustion:

Thermal decomposition. Danger of formation of acrolein above a temperature of 290° C.

Carbon monoxide, carbon dioxide and acrolein are produced in case of fire.

5.3 Information on firefighting

For initial fires: Use fire extinguishers of fire class B.

Alert the fire brigade immediately in case of fire-spread. Access into the danger zone only with full protective clothing and self-contained breathing apparatus.

Endangered containers in the surrounding should be cooled with spray-water.

Defeat escaping vapours with water. Avoid fire-extinguishing water from contaminating surface or ground waters and soil.

6 Accidential Release Measures

6.1 Personal precautions, protective equipment and emergency measures

6.1.1 Information for non-emergency personnel

Danger of slipping on moistered surfaces.

6.1.2 Information for emergency forces.

Avoid contamination of soil, surface and ground waters and sewage system. Absorb the released product with bonding agents.

6.2 Environmental measures

Avoid contamination of soil, surface and ground waters and sewage system. Absorb the released product with bonding agents.

6.3 Methods and material for retention and cleaning up

For larger quantities:

Pump out the released product.

For smaller quantities and remains:

Absorb the released product with bonding agents. Dispose properly.

6.4 Reference to other sections

Note information in sections no. 7, 8 and 13.

7 Handling and Storage

7.1 Precautions for safe handling

Ignition risk when working with fire (welding, grinding etc.) on filled, empty or empty, uncleaned containers.

When hot, risk of splashing in combination with water.

7.2 Conditions for safe storage under consideration of incompatibilities

Requirements on storage rooms and containers:	**Avoid contamination of soil / water.**
Storage category (according to VCI):	**LGK 10 – Combustible liquids**

Information on storage with other products: High affinity for lipophilic solvents.

7.3 Specific end use

Animal Feed, raw material for technical use.

8 Exposure Controls / Personal Protection Measures

8.1 Monitored parameters

Not necessary. No hazardous substance.

8.2 Exposure Controls

Not necessary. No hazardous substance.

9 Physical and Chemical Characteristics

9.1 Information on basic physical and chemical characteristics

State of aggregation:	**liquid to paste-like**	
Colour:	**yellow to dark brown**	
Odour:	**neutral to characteristic**	
Odour treshold:	**not specified**	
pH-value:	**not applicable**	
Melting point/freezing point:	**not specified**	**DGF C-IV 3a**
Boiling point and boiling range:	**not specified**	

Flashpoint:	**not specified**	**DGF C-IV 8**
Evaporation rate:	**not specified**	
Inflammability:	**not specified**	
Upper/lower inflammability- or explosion limits:	**explosion limits not definable bcs. decomposition starts before**	
Vapour pressure (20 °C):	**< 1 mbar**	
Vapour density:	**not specified**	
Relative density:	**not specified**	
Solubility in lipophilic solvents:	**unlimited**	
In water:	**not specified**	
Partition coefficient: n-Octanol/Water:	**not specified**	
Auto-ignition temperature:	**auto-ignition possible, when finely distributed in bleaching earth, insulating or likewise material**	
Decomposition temperature:	**approx. 350° C**	
Viscosity (20 °C):	**not specified**	**DGF C-IV 7b**
Explosive characteristics:	**not specified**	
Oxidizing characteristics:	**not specified**	

Definitions:

DGF C-IV Nr. stays for:	
DGF:	**Deutsche Gesellschaft für Fettwissenschaft (German Society for Fat Science)**
C:	**Fats**
IV:	**Physical testing**
2:	**Density**
3a:	**Melting point / Freezing point**
7:	**Viscosity**
8:	**Flashpoint**

9.2 Other information

Ignition point:	**not specified**	
Temperature classification:	**T2**	
Density (20 °C):	**not specified**	**DGF C-IV 2d**
Soldification point:	**not specified**	

10 Stability and Reactivity

10.1 Reaktivity

When properly used for the purpose intended, no hazardous reactivity is known.

10.2 Chemical stability

Under normal environmental conditions the product is chemically stable.

10.3 Possible hazardous reactions

Thermal decomposition when heating is above the decomposition temperature.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No relevant information available.

10.6 Hazardous decomposition products

Acrolein

11 Toxicological Information

11.1 Information on toxicological effects

Acute toxicity:	**not specified**
Skin irritation/corrosivity:	**not specified**

Severe eye irritation/damage:	**not specified**
Respiratory/skin sensitisation:	**not specified**
Germ-cell mutagenicity:	**not specified**
Carcinogenicity:	**not specified**
Reproductive toxicity:	**not specified**
Specific target organ systemic toxicity (single exposure):	**not specified**
Specific target organ systemic toxicity (repeated exposure):	**not specified**
Aspiration hazard:	**not specified**

12 Ecological Information

12.1 Toxicity

Aquatic toxicity: **not specified**

12.2 Persistance and degradability

Product is completely bio-degradable.

12.3 Bioaccumulation potential

No relevant information available.

12.4 Mobility in soil

Note the waste water limit values.

12.5 Results of the PBT- and vPvB assessment

Results of the PBT- and vPvB assessment**:**

PBT:	not specified
vPvB:	not specified

12.6 Other hazardous effects

No relevant information available.

13 Disposal Considerations

13.1 Waste treatment processes

The waste can be recycled and thermally recovered. Waste requires no particularly monitoring. Can be disposed of along with the domestic waste in accordance with the local regulations.

Waste entry according to list of waste (AVV):	**20 01 25**
Uncleaned packaging:	**disposal according to AVV 15 01**

14 Transport Information

ADR, ADN, IATA; ICAO; IMO; IMDG, RID: Not necessary. The product is not a hazardous material according to transport regulations.

14.1 UN-number

Not applicable.

14.2 Proper UN-shipping name

Not applicable.

14.3 Transport hazard class

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental Hazards

Not applicable.

14.6 Precautionary measures for the user

Not applicable.

14.7 Bulk transport according to appendix II of the MARPOL-Agreement and to the IBC-Code

Not applicable.

15 Regulatory Information

15.1 Regulations for safety, health and environment / specific legislation for the substance / mixture

15.1.1 EU-Regulations

Regulation (EG) No. 1907/2006 (REACH-regulation)

Applicable when determined as an educt for further chemical products.

15.1.2 Nationale regulations

Major Accident Ordinance: **not mentioned**

Water pollution class (according to AwSV): **none (feed)**

15.2 Chemical safety assessment

For this product no chemical safety assessment has been carried out.

16 Other Information

For this product, a safety data sheet is not legally required. The information given in this material safety data sheet is no contractually committed product characteristics and based on our current state of knowledge. They are no product specifications. This material safety data sheet has specifically been created for the mentioned product and its use. Since the user's conditions for the correct use of the product are beyond the producer's control, the user himself has to take care that the relevant legislation has been complied with, when using the product.

List of abbreviations, acronyms and definitions:

ADN:	**Europäisches Abkommen über die internationale Beförderung gefährlicher Güter auf Binnenwasserstraßen (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways)**
ADR:	**Europäisches Abkommen über die internationale Beförderung gefährlicher Güter auf der Straße (European Agreement Concerning the International Carriage of Dangerous Goods by Road)**
AwSV:	**Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (German regulation on facilities for the handling of substances hazardous to water)**
CAS:	**Chemical Abstract Service**
EG-Nr:	**Key identifier of a substance**
IATA:	**International Air Transport Association**
ICAO:	**International Civil Aviation Organization**
IMDG:	**International Maritime Code for Dangerous Goods**
i.S.:	**im Sinne (according to)**
LGK:	**Lagerklasse (Storage Category)**
MARPOL:	**International Convention for Prevention of Marine Pollution from Ships**
PBT:	**Persistent Bioakkumulierend, Toxisch (persistent, bioaccumulative and toxic)**
REACH:	**Registration, Evaluation, Authorisation and Restriction of Chemicals**
RID:	**Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr (Regulation Concerning the International Carriage of Dangerous Goods by Rail)**
UN-Nummer:	**Kennnummer für gefährliche Stoffe (Identification No. for Dangerous Goods)**
vPvB:	**sehr persistent, sehr bioakkumulativ (very persistent, very bioaccumulative)**

Literature References and Data Sources:

1. http://gestis.itrust.de
2. http://echa.europa.eu
3. http://www.sels.de