1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Trade name: medium chain triglycerides
- CAS Number: 73398-61-5
- EC number: 277-452-2
- Registration number: 01-2119492306-35-0004

1.2 Relevant identified uses of the substance or mixture and uses advised against:

- Uses advised against: None of the identified uses is advised against.
- Application of the substance / the preparation:
  - Basic raw material for the chemical industry
  - Cosmetic raw material

1.3 Details of the supplier of the safety data sheet

- Supplier/Manufacturer: Prignitzer Chemie GmbH & Co. KG
  Zur Hafenspitze 15
  D-19322 Wittenberge
- Tel.: +49-3877-92066
- Fax: +49-3877-920689
- info@prignitzer-chemie.de
- Email competent person: sonja.fischer@kft.de
- Information department: See supplier/manufacturer

1.4 Emergency telephone number:

- National Poisons Information Service (NPIS)
  24 hour national number is 0844 892 0111 professionals only
- National Health Service (NHS)
  24 hour national number is 0845 4647 consumer

2 Hazards identification

2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC not applicable
- Information concerning particular hazards for human and environment:
  According to current European laws and regulations the product is not dangerous or toxic material (based on the available data).

2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008 Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void

2.3 Other hazards

- Results of PBT and vPvB assessment
  - PBT: Substance characteristics do not meet screening criteria.
  - vPvB: Substance characteristics do not meet screening criteria.

3 Composition/information on ingredients

3.1 Chemical characterization: Substances

- CAS No. Description:
  73398-61-5 Glycerides, mixed decanoyl and octanoyl

(Contd. on page 2)
4 First aid measures

4.1 Description of first aid measures

General information: If symptoms persist or in case of doubt, seek medical advice.

- After inhalation: Supply fresh air; consult a doctor in case of pain.
- After skin contact:
  - Wash with water and soap.
  - If skin irritation continues, consult a doctor.
- After eye contact:
  - Rinse opened eye for several minutes under running water.
  - If symptoms persist, consult a doctor.
- After swallowing:
  - Drink plenty of water, but never give anything to an unconscious person.
  - Induce vomiting only if affected person is fully conscious.
  - If symptoms persist, consult doctor.

Information for doctor:

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

Symptomatic treatment

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:
- CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:
- Carbon monoxide (CO)
- Carbon dioxide (CO₂)

5.3 Advice for firefighters

Protective equipment:
- Wear self-contained respiratory protective device.
- Wear a fully protective suit.

Additional information:
- Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
- Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Use respiratory protective device against the effects of fumes/dust/aerosol.

6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Clean the affected area carefully, suitable cleaners are:
- Warm water and cleansing agent

Make sure to recycle or dispose of in suitable receptacles.

6.4 Reference to other sections

See Section 8 for information on personal protection equipment.
7 Handling and storage

- Handling:
  - 7.1 Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Avoid contact with eyes and skin.
    Avoid inhalation of vapours.
    Keep away from heat and direct sunlight.
  - Information about protection against explosions and fires: Observe the general rules of industrial fire protection.

- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: Store at ambient temperature.
    - Information about storage in one common storage facility:
      Store away from foodstuffs.
      Store away from feed.
      Store away from oxidizing agents.
  - Further information about storage conditions: Keep receptacle tightly sealed.
  - Storage class: 10 Combustible liquids

- 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.

- 8.1 Control parameters
  - Components with limit values that require monitoring at the workplace: Not required.
  - DNELs
    Abbreviations:
    In = Industrial
    Prof = Professional
    Cons = Consumer

  LLE = Long term, local effects
  LSE = Long term, systemic effects
  SLE = Short term, local effects
  SSE = Short term, systemic effects

  73398-61-5 Glycerides, mixed decanoyl and octanoyl
  Oral DNEL/Cons/LSE 12.61 mg/kg bw/day (Human)
  Dermal DNEL/Cons/LSE 12.61 mg/kg bw/day (Human)
  DNEL/In/LSE 25.21 mg/kg bw/day (Human)
  Inhalative DNEL/Cons/LSE 43.84 mg/m³ (Human)
  DNEL/In/LSE 177.79 mg/m³ (Human)

- PNECs
  Since the substance has no potential for bioaccumulation no PNEC oral was derived.
  No long term toxicity to aquatic organisms expected. Therefore no derivation of PNEC.

- Additional information: The lists that were valid during the creation were used as basis.

- 8.2 Exposure information
  - Personal protective equipment:
    General protective and hygienic measures:
    The usual precautionary measures should be adhered to when handling chemicals.
    Wash hands before breaks and at the end of work.
    Do not inhale gases / fumes / aerosols.
Breathing equipment: If vapors form, use suitable respiratory protective device

Protection of hands:
Upon longer contact:
Chemical resistant gloves

Material of gloves:
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material:
The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information:

Appearance:
- Form: Liquid
- Colour: Colourless

Odour:
- Odour: Odourless
- Odour threshold: not applicable

pH-value:
- not applicable

Change in condition:
- Melting point/Melting range: < -5°C
- Boiling point/Boiling range: > 300°C

Cloud point / clarification point:
- -10°C

Flash point:
- 250°C (1013hPa)

Ignition temperature:
- 425°C

Decomposition temperature:
- > 300°C

Danger of explosion:
- Product does not present an explosion hazard.

Explosion limits:
- Lower: not applicable
- Upper: not applicable

Oxidizing properties:
- None.

Vapour pressure at 20°C:
- < 0.001 Pa ((Q)SAR)

Density at 20°C:
- 945-949 g/l

Dissociation constant pKa
- Not applicable

Solubility in / Miscibility with Water at 20°C:
- < 1 mg/l

Segregation coefficient (n-octanol/water):
- 8,2-10,9 ((Q)SAR)

Viscosity:
- dynamic at 20°C: 30 mPas
- kinematic: Not determined.
- Surface tension: Not determined
10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
  - **Thermal decomposition / conditions to be avoided:**
    - No decomposition if used and stored according to specifications.
    - To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions**
  - No dangerous reactions known.
- **10.4 Conditions to avoid**
  - No further relevant information available.
- **10.5 Incompatible materials:**
  - Strong oxidants
- **10.6 Hazardous decomposition products:**
  - No hazardous decomposition products; if instructions for storage and handling are followed.

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
  - LD/LC₅₀ values that are relevant for classification:
    - **73398-61-5 Glycerides, mixed decanoyl and octanoyl**
      - Oral: LD₅₀ > 5000 mg/kg (mouse)
      - Dermal: LD₅₀ > 2000 mg/kg (rat)
      - RA from 91845-19-1
      - Inhalative LC₅₀/6h 1.86 mg/l (rat)
      - max. attainable conc.
- **Primary irritant effect:**
  - **on the skin:** Skin irritation test (rabbit): no irritation
  - **on the eye:** Animal tests show no irritating effect.
  - **On respiratory tract:** No data available.
- **Sensitization:**
  - No sensitization species: guinea pig OECD 406 in analogy to similar products
- **Other information (about experimental toxicology):**
  - Ames-test: negative
  - Mutagenicity (mammalian cell test): chromosomes aberration negative (OECD 473)
  - Micronucleus Test: mouse: negative (OECD 474)
  - RA from 8001-79-4
- **Carcinogenic, mutagenic effects and adverse effects on reproduction:**
  - Carcinogenicity: no information available
  - **73398-61-5 Glycerides, mixed decanoyl and octanoyl**
    - Oral NOAEL (P) 5000 mg/kg bw/day (rat)
      - RA from 8001-79-4
    - 1000 mg/kg bw/day (rat/female)
      - RA from 91052-13-0
    - NOAEL(developmental) 1000 mg/kg bw/day (rat)
      - RA from 91052-13-0
    - NOAEL(developmental) of 4280 mg/kg bw/d upon i.v. appl. (RA from MCT)
- **Subacute to chronic toxicity:**
  - STOT-single exposure: No classification
  - STOT-repeated exposure: No classification
  - Aspiration hazard: No classification

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Safety data sheet
according to 1907/2006/EC, Article 31

Printing date: 29.11.2011
Version: 1
Revision: 29.11.2011

Trade name: medium chain triglycerides

- Additional toxicological information:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and
  the information provided to us.
  The substance is not subject to classification according to the latest version of the EU lists.

- Repeated dose toxicity:
  73398-61-5 Glycerides, mixed decanoyl and octanoyl
  Oral NOAEL 5000 mg/kg bw/d (rat)
  90d
  RA from 8001-79-4

12 Ecological information

- 12.1 Toxicity
  Aquatic toxicity:
  73398-61-5 Glycerides, mixed decanoyl and octanoyl
  EC50/48h (static) > 0.01 mg/l (daphnia magna) (EU Method C.2)
  no effect up to limit of WS
  RA from 65381-09-1
  EC50/72h (static) > 0.45 mg/l (des) (EU Method C.3)
  LC50 ≥ 53 mg/l (danio rerio) (EU Method C.1)
  96h
  fresh water
  no effect up to limit of WS
  NOEC (static) ≥ 0.45 mg/l (des) (EU Method C.3)
  NOEC/21d ≥ 0.01 mg/l (daphnia magna) (OECD 202 Part II (OECD 211))
  no effect up to limit of WS
  RA from 65381-09-1

- 12.2 Persistence and degradability
  Easily biodegradable

- Other information:
  Biological degradation: 92.7 % after 28 days
  Behaviour in environmental systems:
  12.3 Bioaccumulative potential
  Potential for bioconcentration in aquatic organisms is low.
  12.4 Mobility in soil
  No further relevant information available.

- Additional ecological information:
  General notes: Not hazardous to water according to VwVwS (German regulation) appendix 1 dated 27.7.2005

- 12.5 Results of PBT and vPvB assessment
  PBT: Substance characteristics do not meet screening criteria.
  vPvB: Substance characteristics do not meet screening criteria.

- 12.6 Other adverse effects
  No further relevant information available.

13 Disposal considerations

- 13.1 Waste treatment methods
  Recommendation: Disposal according to instructions of local authorities.

- Uncleaned packagings:
  Recommendation: Disposal must be made according to official regulations.

14 Transport information

- 14.1 UN-Number
  ADR, ADN, IMDG, IATA
  Void

(Contd. on page 7)
Safety data sheet according to 1907/2006/EC, Article 31

Printing date: 29.11.2011  Version: 1  Revision: 29.11.2011

Trade name: medium chain triglycerides

14.2 UN proper shipping name
- ADR, ADN, IMDG, IATA

14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA

14.4 Packing group
- ADR, IMDG, IATA

14.6 Special precautions for user
- Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- Not applicable.

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations
- Water hazard class:
  - Not hazardous for water
  - Code No. according to catalog of water endangering substances: 760

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

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.

- Department issuing MSDS:
  KFT Chemieservice GmbH
  Im Leuschnerpark. 3  D-64347 Griesheim
  Postfach 1451 D-64345 Griesheim
  Phone: +49 6155 86829-0  Fax: +49 6155 86829-25
  Safety Data Sheet Service: +49 6155 86829-22
  Contact: Dr. Sonja Fischer

- Abbreviations and acronyms:
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - ICAO: International Civil Aviation Organization
  - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - DNEL: Derived No-Effect Level (REACH)
  - PNEC: Predicted No-Effect Concentration (REACH)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent

- Sources: Chemical Safety Report
- * Data compared to the previous version altered.
  - Changes have been made to chapters marked with a *, as compared to the previous version.

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