

SAFETY DATA SHEET



Issuing Date: 17-Apr-2010

Revision Date: 30-Jun-2017

Version 21.03

according to Regulation (EC) No. 1907/2006

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name	Vegetable Oil candles
Product Identifier	16010,16021,17011,17111,17511,18111
Synonyms	CE-1214
REACH registration number	01-2119491160-46-0002 01-2119491160-46-0000
Issuing Date:	17-Apr-2010
Version	21.03
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Supersedes Date:	08-Dec-2015

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

Recommended Use	As ambient lightning
Uses advised against	None known.

1.3 Details of the supplier of the safety data sheet

Details of the supplier of the safety data sheet API-X A/S

Supplier API-X A/S, Ryttervangen 13, 7323 Give, Denmark

1.4 Emergency Telephone Number

For Emergency +(45) 82 12 12 12 Giftinformation (DK), Bispebjerg Hospital (open 24 hours)

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

GHS / CLP - Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS].

2.2 Label elements

Label according to Regulation (EC) No. 1272/2008

Hazard pictograms None

Signal Word None

Hazard Statements None

Precautionary Statements None

2.3 Other hazards

Other hazards None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	CAS-No	Weight %	REACH Registration No	EC-No	GHS / CLP Classification 1272/2008 [CLP]	EC Index Number	Notes
Fatty acids, C12-14, Me esters	308065-15-8	100	01-21194911 60-46-0002; 01-21194911 60-46-0000	629-776-4	NC		

3.2 Mixtures

Not applicable

4. FIRST AID MEASURES

4.1 Description of first-aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately if symptoms occur.
Skin contact	Wash off immediately with plenty of water.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed.

Main Symptoms No information available.

4.3 Indication of any immediate medical attention and special treatment needed.

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide (CO₂). Alcohol-resistant foam. Water spray or fog. Dry chemical.

Extinguishing Media Which Must Not Be Used For Safety Reasons Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Special hazard May emit toxic fumes under fire conditions. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3 Advice for firefighters

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

Protective equipment and precautions for firefighters 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 Use personal protective equipment.

Advice for emergency responders Wear protective gloves/protective clothing and eye/face protection. In the case of vapor formation use a respirator with an approved filter.

6.2 Environmental precautions

Environmental precautions Dike far ahead of spill; use dry sand to contain the flow of material. Keep out of drains, sewers, ditches and waterways.

6.3 Methods and materials for containment and cleaning up

Methods for containment Ventilate the area. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

6.4 Reference to other sections

Other information No information available.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Since empty containers retain product residue, follow label warnings even after container is emptied. Keep away from open flames, hot surfaces and sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions Can be stored in most common storage vessels including carbon steel, aluminum, fiberglass and stainless steel. Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials.

7.3. Specific end use(s)

Specific end uses Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

Exposure Guidelines No information available.

Recommended monitoring procedures Not available

Predicted No Effect Concentration (PNEC)

Chemical Name	Fresh Water	Marine water	Intermittent release
Fatty acids, C12-14, Me esters	2 mg/L	0.2 mg/L	0.00255 mg/L

Chemical Name	Freshwater sediment	Marine sediment	Sewage treatment plant	Soil	air	Oral
Fatty acids, C12-14, Me esters	26.6 mg/kg	2.66 mg/kg	100 mg/L	10 mg/kg dw		66.6 mg/kg

8.2 Exposure controls

Engineering Measures Use with local exhaust ventilation. Mechanical - may be necessary if working at elevated temperatures or in enclosed areas.

Personal protective equipment

General information Handle in accordance with good industrial hygiene and safety practice.

Eye Protection Wear safety glasses with side shields (or goggles). Wear suitable face shield.

Hand Protection Neoprene gloves. Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection No special protective equipment required.

Thermal hazards Not available.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Not available.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Physical State @20°C	Liquid	
Form	Liquid	
Color	Water white to Yellow	
Odor	Musty	
<u>Property</u>	<u>Values</u>	<u>Note</u>
pH	Not available	
Melting/freezing point	6.5 °C / 43.7 °F	
Boiling point / boiling range	261.85 - 295.85 °C / 503.33 - 564.53 °F	
Flash point	141.5 °C / 286.7 °F	Closed cup
Evaporation rate	Not available	
Upper flammability limit	Not available	
Lower Flammability Limit	Not available	
Flammability (solid, gas)	Not available	
Vapor pressure	< 0.55 Pa	@ 25 °C
Vapor density	Not available	
Relative density	867.1 - 870.2 kg/m ³	
Solubility	< 0.06 mg/l @ 20° C	
Partition Coefficient (n-octanol/water)	5.4 - 6.4	
Autoignition temperature	220 °C / 428 °F	
Decomposition temperature	Not available	
Viscosity	Not available	@ 20 °C
Explosive properties	Not applicable	
Oxidizing properties	Not available	
Dissociation constant (Henry)	Not available	
<u>9.2 Other information</u>		
Viscosity, dynamic	3.65 mPa s	
Specific gravity	Not available	
Surface tension	Not available	
Density	Not available	

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity Strong oxidizing agents. Strong bases.

10.2 Chemical stability

Stability Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization None under normal processing.

10.4 Conditions to Avoid

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible Materials

Incompatible Materials Strong oxidizing agents. Strong bases.

10.6 Hazardous Decomposition Products

Hazardous Decomposition Products None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Not Classified. Based on the available data, the classification criteria are not met.

Skin corrosion/irritation	Not Classified. Based on the available data, the classification criteria are not met.
Serious eye damage/eye irritation	Not Classified. Based on the available data, the classification criteria are not met.
Skin sensitization	Not Classified. Based on the available data, the classification criteria are not met.
Respiratory sensitization	No data available.
Germ cell mutagenicity	Not Classified. Based on the available data, the classification criteria are not met.
Carcinogenicity	No data available.
Reproductive toxicity	Not Classified. Based on the available data, the classification criteria are not met.
STOT - single exposure	Not Classified. Based on the available data, the classification criteria are not met.
STOT - repeated exposure	Not Classified. Based on the available data, the classification criteria are not met.
Aspiration hazard	Not Classified. Based on the available data, the classification criteria are not met.

Chemical Name	CAS-No	Oral LD50	Dermal LD50	Inhalation LC50
Fatty acids, C12-14, Me esters	308065-15-8	LD50: 2000 mg/kg, bw, OECD 401, Read-across 111-82-0. Species: Rat	-	LC50: > 5 mg/L, 4 hours, OECD 436, Read-across 111-82-0, Species: Rat

Chemical Name	Carcinogenicity	Developmental toxicity	Eye Damage	Mutagenicity	Germ Cell Mutagenicity: Chromosome aberration	Germ Cell Mutagenicity: Ames Test
Fatty acids, C12-14, Me esters		NOAEL: 1000 mg/kg bw/day, OECD 414, Read-across 22047-49-0, Result: No effect, Species: Rat	In vivo, OECD 405, Result: Not irritating, Test Duration: 24 hours, Observation Period: 72 hours, Species: Rabbit		OECD 473, Read-across 111-82-0, Result: Negative, Species: CHL/IU	OECD 471, Read-across 111-82-0, Result: Negative, Species: Salmonella Typhimurium (Salmonella enterica)

Chemical Name	Neurological Effects	Effects on fertility	Reproductive toxicity	Skin corrosion/irritation	Toxicokinetics, metabolism and distribution	Sensitization
Fatty acids, C12-14, Me esters			NOAEL: 1000 mg/kg bw, OECD 422, Read-across 67762-38-3, Result: No effect, Species: Rat	OECD 404, Read-across 111-82-0, Result: Not irritating, Test Duration: 4 hours, Species: Rabbit	In vivo, OECD 417, Read-across 111-62-6, Result: Rapidly hydrolysed, Species: Rat	

Chemical Name	Skin sensitization	STOT - single exposure	STOT - repeated exposure	Aspiration hazard
Fatty acids, C12-14, Me esters	In vivo, OECD 406, EU Method B,6. Read-across 111-82-0, Result: Not sensitising, Species: Guinea pig		NOAEL: 5500 mg/kg bw/day, Sub-chronic, OECD 408, Read-across 111-62-6, Result: No effect, Species: Rat	

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Acute toxicity

Chemical Name	CAS-No	Toxicity to Fish (LC50)*	Toxicity to algae (EC50)*	Toxicity to daphnia and other aquatic invertebrates (EC50)*	Toxicity to Microorganisms (EC50)*	Toxicity to other organisms
Fatty acids, C12-14, Me esters	308065-15-8	LC50: > 1 mg/L, 96 hours, OECD 203. Read-across 111-82-0, Species: Japanese rice-fish (Oryzias latipes)	EL50: >=100 mg/L, 72 hours, OECD 201, Species: Green algae (Desmodesmus subcapitata)	EC50: >100 mg/L, 7 days, OECD 211, Species: Water flea (Daphnia magna)	NOEC: =>1000 mg/kg, 3 hours, OECD 209, Read-across 111-82-0, Species: Activated sludge of a predominantly domestic sewage	-

Chronic Toxicity

Chemical Name	CAS-No	Toxicity to fish (NOEC or ECx)*	Toxicity to algae (NOEC or ECx)*	Toxicity to daphnia and other aquatic invertebrates (NOEC or ECx)*	Toxicity to Microorganisms (NOEC or ECx)*	Toxicity to other organisms
Fatty acids, C12-14, Me esters	308065-15-8			NOELR: >100 mg/L, 21 days, OECD 211. Species: Water flea (Daphnia magna)	NOEC >= 1000 mg/l, 3 hours, OECD 209. Read-across 111-82-0. Activated sludge of a predominantly domestic sewage	NOEC: 1000 mg/kg, 28 days, Soil dw. OECD 222. Read-across 111-82-0. Species: Earthworm (Eisenia fetida)

12.2 Persistence and degradability**Persistence and degradability**

Chemical Name	CAS-No	Ready Biodegradation Test (OECD 301)	Percent degradation (Aerobic biodegradation)	Percent degradation (Aerobic biodegradation-soil)	Percent degradation (Anaerobic biodegradation)
Fatty acids, C12-14, Me esters	308065-15-8		78%, OECD 301C, Test Duration: 28 days, Read-across 111-82-0, Result: Readily biodegradable, Species: Activated sludge of a predominantly domestic sewage.		

Chemical Name	CAS-No	Abiotic Degradation Hydrolysis	Half-life (Photolysis-aqueous)	Abiotic Degradation Photolysis
Fatty acids, C12-14, Me esters	308065-15-8	t1/2 (pH 7): 7,283 yr at 25 °C. HYDROWIN v2.00.		29.2 h DT50 (24h day), AOPWIN v1,92.

12.3 Bioaccumulative potential**Bioaccumulative potential**

Chemical Name	CAS-No	Octanol/water partition coefficient	Bioconcentration factor (BCF)
Fatty acids, C12-14, Me esters	308065-15-8	5.41 - 6.41	201 L/kg, BCFBAF v3.01, Species: Fish

12.4 Mobility in soil**Mobility**

Chemical Name	CAS-No	log Koc	Dissociation constant (Henry)
Fatty acids, C12-14, Me esters	308065-15-8	3.85 @ 25 °C, KOCWIN v2.0	

12.5 Results of PBT and vPvB assessment**PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6 Other adverse effects**Other adverse effects**

No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods**Waste from Residues / Unused**

Keep out of drains, sewers, ditches and waterways. Disposal should be in accordance with

Products	applicable regional, national and local laws and regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.
EWC Waste Disposal No	Not available.
Disposal recommendations	Keep out of drains, sewers, ditches and waterways. Disposal should be in accordance with applicable regional, national and local laws and regulations.

13.2 Additional information.

Additional information	No information available.
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14. TRANSPORT INFORMATION**IMDG**

14.1 UN Number	Not regulated
14.2 UN Proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazards	Not regulated
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	No information available
Pollution Category	Pollution Category: Y
Ship Type	Ship Type: 2

IATA

14.1 UN no	Not regulated
14.2 UN Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazards	Not regulated
14.6 Special precautions for user	None

ICAO

14.1 UN no	Not regulated
14.2 UN Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazards	Not regulated
14.6 Special precautions for user	None

ADR

14.1 UN no	Not regulated
14.2 UN Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazards	Not regulated
14.6 Special precautions for user	None

RID

14.1 UN no	Not regulated
14.2 UN Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazards	Not regulated
14.6 Special precautions for user	None

ADN

14.1 UN no	Not regulated
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14.2 UN Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental Hazards	Not regulated
14.6 Special precautions for user	None

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I Not Listed

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II, Part A Not Listed

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II, Part B Not Listed

Persistent Organic Pollutants per (EC) 850/2004 - Annex 1 - Substances Subject to Prohibition Not Listed

European Pollutant Release and Transfer Registry (E-PRTR) (166/2006) - Threshold Quantities Not Listed

AUTHORIZATIONS - REACH Title VII

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation Not Listed

Restrictions on Use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not Listed

Other Regulations

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

National regulatory information

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC

15.2 Chemical Safety Assessment

Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance

WGK - Classification (VwVwS)

WGK 1

International Inventories

Australian Inventory of Chemical Substances (AICS)	-
Canadian Domestic Substances List (DSL)	-
Canadian Non-Domestic Substances List (NDSL)	-
China Inventory of Existing Chemical Substances (IECSC)	-
Europe European List of Notified Chemical Substances (ELINCS)	-
European Inventory of Existing Commercial Chemical Substances (EINECS)	-
Japan Existing and New Chemical Substances (ENCS)	-
Korean Existing and Evaluated Chemical Substances (KECL)	-
New Zealand Inventory of Chemicals (NZIoC)	-
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	-
Taiwan	Complies
United States Toxic Substances Control Act Section 8(b) Inventory (TSCA)	-

16. OTHER INFORMATION

16.1 Indication of changes

Issuing Date: 17-Apr-2010
Revision Date: 30-Jun-2017
Reason for revision Change in SECTION 14: Transport information

16.2 Abbreviations and acronyms

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS-No: Chemical Abstracts Service number
CLP - The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)
EINECS: European Inventory of Existing Commercial Chemical Substances
EC-Number: EINECS and ELINCS Number (see also EINECS and ELINCS)
EC50: Calculated concentration causing a 50% reduction in cellular reproduction
GHS- Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
IATA - International Air Transport Association
LC50: Lethal Concentration to 50% of a test population
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose)
PVC- Polyvinylchloride
REACH- Registration, Evaluation and Authorization of Chemicals
STEL - Short term exposure limit
STP- Sewage treatment plant

16.3 Key literature references and sources for data

No information available

16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]**16.5 Full text of H-Statements referred to under sections 2 and 3**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

16.6 Training Advice

No information available

16.7 Further information**Disclaimer**

The submission of the SDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied are for use only in connection with occupational safety and health. The information contained herein has been compiled from sources considered by API-X A/S to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific product designated herein, and does not relate to use in combination with any other material of any other process. API-X A/S assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the controlled product.

End of SDS