AGRUMARIA CORLEONE s.p.a.
SICILIAN CITRUS PRODUCTS

SAFETY DATA SHEET
Issue date : 19 June 2018

PRODUCT: ORANGE OIL

Section 1.Identification of the substance or the mixture and of the supplier

1.1. Product Identifier

Product identifier	Orange Oil
Biological Definition	Citrus Aurantium Dulcis Orange Peel Oil is the volatile oil obtained from fresh orange peels.
INCI name	Citrus Aurantium Dulcis Orange Peel Oil
Synonyms and Trade Names	Orange Oil
Botanical name	Citrus Sinensis (L.) Osbeck
CAS number	8008-57-9
EINECS number	232-433-8
FEMA number	2825
FDA number	182.2
CoE number	143
RIFM number	192

1.2. Relative identified uses of the substance or mixture and uses advised against
Flavours and Fragrances : Use in accordance with good manufacturing and industrial hygiene practices. Not for personal use in this concentration.

1.3. Details of the supplier of the safety data sheet

Company name	Agrumaria Corleone S.p.A.
Company address	Via Salvatore Corleone, 12, 90124 - PALERMO
Contact	Dr.ssa Valeria Corleone - Quality Assurance
E-mail address	vacorleone@agrumariacorleone.com
Company phone	+39 (0) 916213933

1.4. Emergency telephone number

Office hours	+39 (0) 916213933
Out of hours contact	+39 (0) 916213933

Section 2.Hazard Identification

2.1 *Classification of the substance or mixture*
The full text for the all hazard statements are displayed in section 16

Classification under Regulation (EC) N. 1272/2008

PRODUCT: ORANGE OIL

Class and category of danger	Flammable liquid , category 3 , H226 Aspiration Hazard , category 1 , H304 Skin irritation/corrosion , category 2 , H315 Skin sensitization , category 1 , H317 Aquatic Acute hazard , category 1 , H400 Aquatic Chronic hazard , category 1 , H411

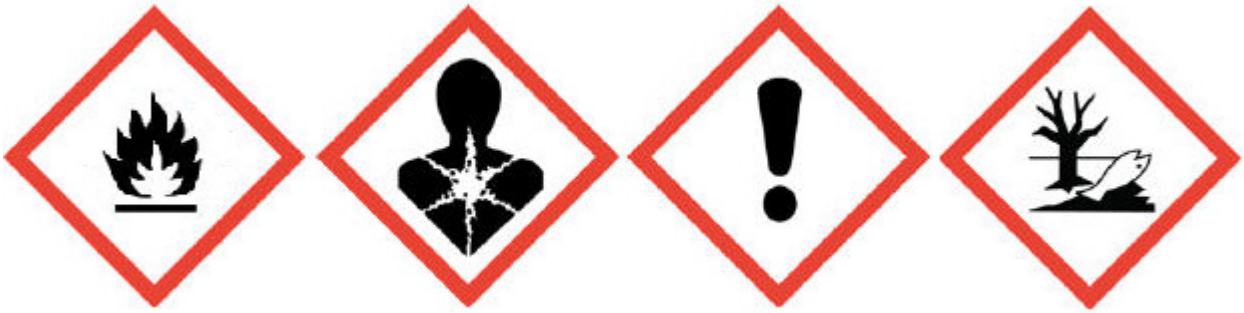
Classification under Directive 67/548/EEC

Hazard symbols	Xn – Harmful N - Dangerous for the environment

2.2 *Label elements*

Label in accordance with (EC) N. 1272/2008

GHS02 **GHS08** **GHS07** **GHS09**



Signal word	Danger
Contains	Limonene, alfa-Pinene, Myrcene, beta-Pinene, Linalool
Hazard statement	H226 , flammable liquid and vapour H304 , May be fatal if swallowed and enters airways H315 , cause skin irritation H317 , may causes an allergic skin reaction H400 , very toxic to aquatic life H411 , Toxic to aquatic life with long-lasting effects
Precautionary statements	P210 , keep away from heat, sparks, open flames and hot surface. No smoking P233 , keep container tightly closed P240 , Ground/bond container and receiving

equipment
P241 , Use explosion-proof electrical/ventilating/light equipment
P242 , Use only non-sparking tools
P243 , Take precautionary measures against static discharge
P261 , Avoid breathing dust/fume/gas/mist/vapours/spray
P264 , Wash hands and other contacted skin thoroughly after handling
P272 , Contaminated work clothing should not be allowed out of the workplace
P273 , Avoid release to the environment
P280 , Wear protective gloves/clothing , eye/face protection
P301/310 , IF SWALLOWED: immediately call a POISON CENTER or doctor/physician
P303/361/353 , IF ON SKIN (or hair) : Remove/Take off immediately all contaminated clothing . Rinse skin with water/shower
P331 , Do NOT induce vomiting
P333/313 , If skin irritation or a rash occurs: Get medical /attention
P362 , Take off contaminated clothing and wash before reuse
P370/378 , In case of fire : Use carbon dioxide, dry chemical, foam for extinction
P391 , Collect spillage
P403/235 , store in well ventilated place . keep cool
P405 , Store locked up
P501 , dispose of contents/container to approved disposal site , in accordance with local regulations

2.3 *Other Hazards*

PBT or vPvB according to Annex XIII : No additional data available.
Adverse physio-chemical properties : No additional data available.
Adverse effects on human health : No additional data available.

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Section 3.Composition/Information on ingredients

3.1 *Substances*

<99.0 % D-Limonene CAS-No: 5989-27-5 EC No.: 227-813-5 Classification (EC 1272/2008): Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317 Asp. Tox. 1 - H304, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H411
< 1.0% α-Pinene CAS-No: 80-56-8 EC No.: 201-291-9 Classification (EC 1272/2008): Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Skin Sens. 1 - H317 Asp. Tox. 1 - H304
< 3.0 % Myrcene (7-methyl-3-methyleneocta-1,6-diene) CAS-No: 123-35-3 EC No.: 204-622-5 Classification (EC 1272/2008): Flam. Liq. 3 - H226, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319 Asp. Tox. 1 - H304
< 2.0 % Decanal CAS-No: 112-31-2 EC No.: 203-957-4 Classification (EC 1272/2008): Skin Irrit. 2 - H315, Aquatic Chronic 3 - H412
< 2.o% Linalool CAS-No: 78-70-6 EC No.: 201-134-4 Classification (EC 1272/2008): Skin Irrit. 2 - H315

Section 4.First-aid measures

4.1 *Description of first aid measures*

Inhalation	Remove from exposure area to fresh air and immediately obtain medical advice.
Ingestion	Wash mouth out with water and immediately obtain medical advice. DO NOT INDUCE VOMITING !
Skin Contact	Take off clothing and wash immediately with soapy water. Seek medical advice if irritation persists of there is any sign of skin damage.
Eyes Contact	Rinse thoroughly with water for at least 15 minutes. Remove contact lenses. Seek medical advice.

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

May be fatal if swallowed and enters airways

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Causes skin irritation , can cause bloodshot eyes
May cause an allergic skin reaction
For inhalation can cause slight headache

4.3 ***Indication of any immediate medical attention and special treatment needed***
Immediate medical assistance : see section 4.1 for further information
Immediate special treatment : see section 4.1 for further information
First aid specific means : eye wash fountains/safety shower should be available in the work area

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Section 5.Firefighting measures

5.1 ***Extinguishing media***

Suitable extinguishing media :
Small fire : Use carbon dioxide , dry chemical , foam . Spray to base of flames.
Large fire : Use water spray or fog. Cool containers with a water jet to prevent pressure build up, autoignition or explosion.

Unsuitable extinguishing media :
Pressurised water jet.

5.2 ***Special hazards arising from the substance or mixture***
Vapour may form an explosive mixture with air. In case of fire, Carbon monoxide , Carbon dioxide, smoke and soot may be liberated.

5.3 ***Advice for fire fighters***
Standard procedure for chemical fires. Spray extinguishing media to base of flames. Wear protective clothing. Avoid inhalation of vapours. Wear suitable respiratory equipment . In case of ignition , cool the endangered containers .

Section 6.Accidental release measures

6.1 ***Personal precautions , protective equipment and emergency procedures***
Ensure adequate ventilation of the working area. Evacuate personnel to a safe area. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2 ***Environmental precautions***
Do not allow to enter canals, waterways, groundwater , soil .

6.3 ***Methods and materials for containment and cleaning up***
Remove ignition sources and provide adequate ventilation . Soak up with absorbent , inert material , or sand . Wash with water and detergent .

6.4 ***Reference to other sections***
Please refer to section 4,8 and 13 .

Section 7.Handling and storage

7.1 ***Precautions for safe handling***
Apply good manufacturing practice & industrial hygiene practices, ensuring proper workplace ventilation. Keep original container closed. Avoid contact with skin and eyes. Observe good personal hygiene, and do not eat, drink or smoke whilst handling. Keep away from heat, sparks and open flame. Avoid exposing to high temperatures during processing.

7.2 ***Conditions for safe storage , including any incompatibilities***
To be stored in tightly closed containers, preferably under an inert atmosphere (e.g. nitrogen) with minimum head space protected from daylight. Store in a dry, aerated place (between 0 – 25°C) away from heat and ignition sources.

7.3 ***Specific end uses***
Flavours and Fragrances according to good manufacturing and industrial hygiene practices .

Section 8.Exposure controls/personal protection

8.1 ***Control parameters***
No additional data available

8.2 ***Exposure controls***

Protective Equipment

Process Conditions	Provide eyewash station.
Engineering Measures	Provide adequate ventilation Avoid static discharges in working area.
Respiratory Equipment	Avoid breathing vapours. Respiratory

	equipment should not be necessary with adequate
Hand Protection	Avoid all skin contact. Wear chemical resistant gloves (PVC) tested to EN374.
Skin Protection	Wear apron or protective clothing in case of splashes.
Eye Protection	Avoid contact with eyes. Wear approved safety goggles with built in frame tested to EN166.
Other Protection	No additional data available.
Hygiene Measures	Good personal hygiene practices are always advisable, especially when working with chemicals /oils. Keep away from foodstuffs, beverages
Environmental Exposure Controls	Avoid discharging into drainage water. Only eliminate by authorized companies.

Section 9.Physical and chemical properties

9.1 *Information on basic physical and chemical properties*

Appearance	From yellow to red liquid
Odour	Characteristic of orange
Odour threshold	Not determined
pH	Not applicable
Melting point/Freezing point	No data available
Initial boiling point and range	160.00 °C.@760.00 mm Hg
Flash point	53°C
Evaporation rate(vs H_2O)	< 1
Upper/lower flammability	Not data available
Vapour pressure	0.97 mm/Hg @ 25.00 °C
Vapour density	> 1
Relative density	0,84 – 0.87 gr/ml @ 25.00 °C
Solubility	Not soluble in water
Partition coefficient n-octanol/water	Not data available
Auto-ignition temperature	235°C
Decomposition temperature	Not data available
Viscosity	1 mPa*s
Explosive properties	Not data available
Oxidizing properties	Not data available

9.2 *Other Information*

Not available

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Section 10. Stability and reactivity

10.1 ***Reactivity***
Not present important reactivity hazard

10.2 ***Chemical stability***
Stable at normal conditions of storage

10.3 ***Possibility of hazardous reactions***
Not expected at normal conditions of use

10.4 ***Conditions to avoid***
Excessive heat , flames

10.5 ***Incompatible materials***
Acids , Alkalis , oxidising agents

10.6 ***Hazardous decomposition products***
Not expected under normal temperature conditions and recommended use.

Section 11. Toxicological Information

11.1 ***Information of toxicological effects***

Acute Dermal Toxicity LD50 [Rat]	>5000 mg/kg
Acute Oral Toxicity LD50 [Rat]	>5000 mg/kg
Acute Inhalation LD50 [Rat]	>5000 mg/kg
Skin Corrosion/irritation	Causes skin irritation (H315)
Serious eye damages/irritation	Not classified as irritating today (source CSR)
Respiratory or skin sensitisation	May cause an allergic skin reaction (H317)
Germ cell mutagenicity	Negative (sources CSR)
Carcinogenicity	No additional data available
Reproductive toxicity	No tested (sources CSR)
STOT-single exposure	No additional data available
Aspiration hazard	No additional data available
STOT-Repeated exposure	May be fatal if swallowed and enters airways (H304)
Photo-toxicity	No additional data available

Section 12. Ecological information

PRODUCT: ORANGE OIL

12.1 ***Toxicity***
The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.2 ***Persistence and degradability***
To be considered as readily biodegradable based on its ready biodegradability. Oil does not fulfil the criteria for persistence.

12.3 ***Bioaccumulative potential***
H411 Toxic to aquatic life with long-lasting effects.

12.4 ***Mobility in soil***
Considered as a readily biodegradable NCS. Based on the ready biodegradability of the NCS, simulation tests in surface water, sediment and soil are not required in accordance with column2 of REACH Annex IX.

12.5 ***Results of PBT and vPvB assessment***
This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 ***Other adverse effects***
Do not discharge into the environment especially not into waterways, sewers and the sea.

Section 13. Disposal considerations

13.1 ***Waste treatment methods***
Dispose in accordance with federal, state or local environmental regulations. Contact a licensed professional waste disposal service to dispose of empty containers , that should be taken to an approved waste handling site for recycling or disposal .

Section 14. Transport Information

14.1 ***UN number***
UN No. Road/Sea/Air : UN 1169

14.2 UN Proper Shipping Name
EXTRACTS, AROMATIC, LIQUID

14.3 ***Transport hazard class***

ADR/RID/Class	3 Flammable liquid
IMDG Class	3 Flammable liquid
ICAO Classe/Division	3 Flammable liquid

Transport Labels

14.4 ***Packaging group***

ADR/RID/AND Packing Group	III
IMDG Packing Group	III
ICAO Packing Group	III

14.5 ***Environmental hazards***

Environmentally hazardous substances/Marine pollutant

14.6 ***Special precautions for user***

This product contains flammables and dangerous for the environment. In case on pouring out, make sure label new packaging accordingly. Reproducing original label with relevant symbols.

14.7 ***Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code***

Not additional data available

Section 15. Regulatory Information

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as

well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2 ***Chemical Safety assessment***
No additional data available

Section 16. Other Information

Hazard and/or precautionary Statements in full	H226 , flammable liquid and vapour H304 , May be fatal if swallowed and enters airways H315 , cause skin irritation H317 , may causes an allergic skin reaction H411 , Toxic to aquatic life with long-lasting effects
Other information	Complies with REACH guidance for SDS as circulated by ECHA 2011.
Revision Date	19 June 2018
Reason of Revision	1st SDS format

The information provided in this safety data sheet is correct to the best of our knowledge. Furthermore, the information quoted is intended only as guidance for safe handling, use, processing, storage, transportation, disposal and is not to be considered as a warranty or quality specification.