

1 Identification

- **Product identifier**
- **Trade name(s):** ORANGE OIL CAL. FCC
- **Article number(s):** 40800
- **CAS Number:**
8008-57-9
- **EC number:**
232-433-8
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Details of the supplier of the safety data sheet**
- **MANUFACTURER / SUPPLIER:**
NOW Health Group. Inc
NOW Foods
395 S. Glen Ellyn Rd.
Bloomington, Il 60108

- EMERGENCY CONTACTS:** CHEM-TEL, Inc. USA
1 800 255-3924 or +1 813 248-0585

- **Information Department:**
Chem Tel: 1 800 255-3924

- **Emergency telephone number:** Chem Tel: 1 800 255-3924

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

H226 Flammable liquid and vapour.



GHS08 Health hazard

H304 May be fatal if swallowed and enters airways.



GHS07

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Dangerous Ingredients:



Xn; Harmful

R65: Harmful: may cause lung damage if swallowed.



Xi; Irritant

R38-43: Irritating to skin. May cause sensitization by skin contact.

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N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R10: Flammable.

· **Information concerning particular hazards for human and environment:** Not applicable.

· **Label elements**

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Code letter and hazard designation of product:**

Xn Harmful

N Dangerous for the environment

· **Risk phrases:**

10 Flammable.

38 Irritating to skin.

43 May cause sensitization by skin contact.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

65 Harmful: may cause lung damage if swallowed.

· **Safety phrases:**

24 Avoid contact with skin.

37 Wear suitable gloves.

61 Avoid release to the environment. Refer to special instructions/Safety data sheets

62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 2

Reactivity = 0

· **WHMIS-ratings (scale 0 - 4)**

HEALTH	1
FIRE	2
REACTIVITY	0

Health = 1

Fire = 2

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

8008-57-9 Oils, orange

· **Identification number(s)**

· **EC number:** 232-433-8

· **Additional information:**

FEMA:2825

Limonene 95% (average value)

Citral 0.2%

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4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

*** 6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Wear gloves and eye protection. Avoid inhalation and contact with skin and eyes. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after any chemical contact, before breaks and meals and at the end of each work period. Contaminated clothing and shoes should be thoroughly cleaned before re-use.
no special measures required
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
It is recommended that this material be stored in a cool, dry, well ventilated area, in tightly sealed, full containers.

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **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.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **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 break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

* 9 Physical and chemical properties

Values are indicative. Consult product specification for product specific ranges.

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

· Form:	Liquid
· Color:	Yellow
· Odor:	Characteristic
· Odour threshold:	Not determined.

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· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	ca. 176 °C (ca. 349 °F)
· Flash point:	45 °C (113 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Not determined.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	1 hPa (1 mm Hg)
· Density at 20 °C (68 °F):	0.84 g/cm ³ (7.01 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water at 20 °C (68 °F):	0 g/l
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No further relevant information available.

* 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
Oral	LD50	>5000 mg/kg (Rat)
Dermal	LD50	>5000 mg/kg (Rabbit)
	LC50	not available mg/l (Daphnia magna)

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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.


12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (Assessment by list): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even small quantities leak into the ground.
 Also poisonous for fish and plankton in water bodies.
 Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

* 14 Transport information

- | | |
|---|---|
| · UN-Number | |
| · DOT, ADR, IMDG, IATA | UN1993 |
| · UN proper shipping name | |
| · DOT, IMDG, IATA | FLAMMABLE LIQUID, N.O.S. (Oils, orange, DIPENTENE) |
| · ADR | 1993 FLAMMABLE LIQUID, N.O.S. (not viscous) (Oils, orange, DIPENTENE) |
| · Transport hazard class(es) | |
| · DOT | |
|  | |
| · Class | 3 Flammable liquids. |

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· Label	3
· ADR	
· Class	3 (F1) Flammable liquids
· Label	3
· IMDG	
· Class	3 Flammable liquids.
· Label	3
· IATA	
· Class	3 Flammable liquids.
· Label	3
· Packing group	III
· DOT, ADR, IMDG, IATA	III
· Environmental hazards:	Environmentally hazardous substance, liquid; Marine Pollutant
· Marine pollutant:	Yes (P) Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	F-E,S-E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	USA: proper shipping name: "Combustible liquid". If in non-bulk containers and there is no other subsidiary hazard then no hazard label is required. 128
· DOT	
· Remarks:	USA: proper shipping name: "Combustible Liquid" - No hazard label is required if shipped in containers less than 450 liters (119 gal.) and there is no other subsidiary hazard.
· UN "Model Regulation":	UN1993, Flammable liquids, n.o.s. (Oils, orange, Dipentene), ENVIRONMENTALLY HAZARDOUS, 3, III 128

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15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.
- **Proposition 65**
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.

- **International Chemical Inventories**
- **DSL Canadian Domestic Substances List** Substance is listed.
- **Australian Inventory of Chemical Substances** Substance is listed.

- **Product related hazard informations:**
The product has been classified and marked in accordance with directives on hazardous materials.

- **Hazard symbols:**
Xn Harmful
N Dangerous for the environment

- **Risk phrases:**
10 Flammable.
38 Irritating to skin.
43 May cause sensitization by skin contact.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
65 Harmful: may cause lung damage if swallowed.

- **Safety phrases:**
24 Avoid contact with skin.
37 Wear suitable gloves.
61 Avoid release to the environment. Refer to special instructions/Safety data sheets
62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

- **National regulations:**
- **Water hazard class:** Water hazard class 2 (Assessment by list): hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* 16 Other Information

This Information is supplied by our vendor.

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.

- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
P: Marine Pollutant
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

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Reviewed on 08/19/2013

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LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

· * Data compared to the previous version altered.

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USA