

SAFETY DATA SHEET

ORANGE ESSENCE #2

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Product name : ORANGE ESSENCE #2

Product No. : 02182DG

Use of the substance/preparation : All purpose cleaner/degreaser

Company/undertaking identification

Manufacturer : Essential Industries, Inc.
P.O. Box 12
28391 Essential Rd.
Merton, WI 53056-0012 USA

Supplier : Essential Industries, Inc.
P.O. Box 12
28391 Essential Rd.
Merton, WI 53056-0012 USA

Emergency telephone number : 001-262-821-7814

2. Composition/information on ingredients

Substance/Preparation : Preparation

Ingredient Name	CAS number	%	EC Number	Classification
(R)-p-Mentha-1,8-diene	5989-27-5	10	227-813-5	R10 Xi; R38 R43 N; R50/53
See Section 16 for the full text of the R Phrases declared above				

* Occupational Exposure Limit(s), if available, are listed in section 8

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R10
R43
N; R51/53

Physical/Chemical Hazards : Flammable.

Human health hazards : May cause sensitization by skin contact.

Environmental Hazards : Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

See Section 11 for more detailed information on health effects and symptoms.

4. First aid measures

First aid measures

Inhalation : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Date of issue : 5/22/2005.

Page: 1/5

ORANGE ESSENCE #2

Specific treatments : None identified.

See Section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

- Extinguishing media** : Use foam or all purpose dry chemicals to extinguish. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Special exposure hazards** : Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
Not available.
- Hazardous thermal decomposition products** : None identified.
- Special protective equipment for fire-fighters** : Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
- Remark** : No additional remark.

6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5). Do not touch or walk through spilled material.
- Environmental Precautions and Clean-up Methods** : Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information.
If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Avoid contact with skin and clothing. Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Avoid contact of spilled material and runoff with soil and surface waterways. Wash thoroughly after handling.
- Storage** : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
- Packaging materials**
- Recommended** : Use original container.
- Specific uses** : Industrial applications

8. Exposure controls/personal protection

- Exposure limit values** : Not available.
- Recommended monitoring procedures** : Good general ventilation should be sufficient to control airborne levels.
- Exposure controls**
- Occupational exposure controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
- Respiratory protection** : A respirator is not needed under normal and intended conditions of product use.
- Hand protection** : Use latex gloves.
- Eye protection** : Safety glasses.

ORANGE ESSENCE #2

Skin protection : Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces. Appropriate techniques should be used to remove potentially contaminated clothing.

9. Physical and chemical properties

General information

Appearance

Physical state : Liquid.
Color : Light yellow.
Odor : Citrus.

Important health, safety and environmental information

pH : 8.5 - 9.5
Boiling Point : The lowest known value is 100°C (212°F) (water). Weighted average: 110.11°C (230.2°F)
Melting Point : May start to solidify at 0°C (32°F) based on data for: water.
Flash point : 124°F 51°C (C.C.)
Flammability (solid, gas) : Not applicable.
Explosive properties : Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.
Oxidizing Properties : Not available.
Relative density : 0.99 g/cm³
Solubility : Easily soluble in cold water, hot water, methanol, acetone.
Octanol/water partition coefficient : Not determined.
Viscosity : Not determined.
Evaporation rate (butyl acetate = 1) : 0.36 (water) compared to Butyl acetate.

Other information

10. Stability and reactivity

Stability : The product is stable.
Conditions to avoid : Avoid all possible sources of ignition (spark or flame).
Materials to avoid : None identified.
Hazardous decomposition products : None identified.

11. Toxicological information

Potential Acute Health Effects

Inhalation : May cause respiratory tract irritation.
Ingestion : May irritate digestive tract.
Skin contact : May cause sensitization by skin contact. Prolonged or repeated contact may dry skin and cause irritation.
Eye contact : May cause eye irritation.

Acute toxicity

<u>Ingredient Name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
(R)-p-Mentha-1,8-diene	LD50	4400 mg/kg	Oral	Rat
	LD50	5600 mg/kg	Oral	Mouse

Carcinogenicity : No carcinogenic effect known.
Mutagenicity : No mutagenic effect.
Reproductive toxicity : No teratogenic effect.

Over-exposure signs/symptoms

Other adverse effects : Not available.

12. Ecological information

Ecotoxicity Data

<u>Ingredient Name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
(R)-p-Mentha-1,8-diene	Daphnia pulex (EC50)	48 hour(s)	69.6 mg/l
	Pimephales promelas (LC50)	96 hour(s)	0.702 mg/l

Mobility : Not available.

Other adverse effects : Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

13. Disposal considerations

Methods of disposal : Avoid contact of spilled material and runoff with soil and surface waterways. Dispose of according to all federal, state and local applicable regulations.

Waste Classification : Not applicable.

European Waste Catalogue (EWC) : Not available.

Hazardous Waste : The classification of the product may meet the criteria for a hazardous waste

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
ADR/RID Class	Not Regulated.	-	-	-		-
ADN Class	Not Regulated.	-	-	-		-
IMDG Class	Not Regulated.	-	-	-		-
IATA-DGR Class	Not Regulated.	-	-	-		-

15. Regulatory information

EU Regulations

Hazard symbol(s) :



Irritant, Dangerous for the environment

Risk phrases :

R10- Flammable.

R43- May cause sensitization by skin contact.

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases :

S24- Avoid contact with skin.

S28- After contact with skin, wash immediately with plenty of water.

S29- Do not empty into drains.

S37- Wear suitable gloves.

Contains :

(R)-p-Mentha-1,8-diene

227-813-5

Product Use :

Classification and labeling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments and the intended use.

- Industrial applications

Additional Warning Phrases :

Contains ((R)-p-Mentha-1,8-diene). May produce an allergic reaction.

EC Statistical Classification (Tariff Code) :

32089091

National regulations

Date of issue :

5/22/2005.

Page: 4/5

16. Other information

Full text of R phrases referred to in Sections 2 and 3 - United Kingdom (UK) : R10- Flammable.
R38- Irritating to skin.
R43- May cause sensitization by skin contact.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications referred to in Sections 2 and 3 - United Kingdom (UK) : Xi - Irritant
N - Dangerous for the environment.

HISTORY

Date of printing : 5/23/2005.
Date of issue : 5/22/2005.
Date of Previous Issue : No Previous Validation.
Version : 1
Prepared by : Regulatory Affairs.

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.