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Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date: 25 October 2017 Revision: 25 October 2017

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

1.1 Product identifier

· Trade name: Orange Blossom v.2

· Article number: 100570

1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

· Application of the substance / the mixture:

All-purpose cleaner

Degreaser

Odour neutralising agent

1.3 Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Theochem Laboratories 7373 Rowlett Park Drive Tampa, FL 33610

Phone: 813-237-6463



ChemTel Inc.

(800)255-3924 (North America) +1 (813)248-0585 (International)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Classifications listed are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H400, H410.

Flam. Liq. 3 H226 Flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aguatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the Globally Harmonized System within the United States.

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms

The following pictogram(s) are only for use within Europe: GHS09.









GHS02 GHS07 GHS08 GHS09

· Signal word Danger

· Hazard-determining components of labelling:

d-limonene

orange terpenes

Hazard statements

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H410.

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways. H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
------	---

smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing mist/vapours/spray.
P264 Wash thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves / eye protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P331 Do NOT induce vomiting.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
In case of fire: Use for extinction: CO2, powder or water spray.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

NFPA ratings (scale 0 - 4)



Health = 2 Fire = 2 Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

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Health = 2
Fire = 2
Reactivity

- 2.3 Other hazards There are no other hazards not otherwise classified that have been identified.
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

· Components:		
CAS: 5989-27-5	d-limonene	50-100%
EINECS: 227-813-5 Index number: 601-029-00-7 Reg.nr.: 01-2119529223-47-XXXX	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Irrit. 2, H315; Skin Sens. 1, H317	
CAS: 8028-48-6 EINECS: 203-972-6	orange terpenes Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%
CAS: 68439-46-3 EC number: 614-482-0 Reg.nr.: 01-2119980051-45-XXXX	alcohols, C9-11, ethoxylated Eye Irrit. 2, H319	≤ 2,5%
CAS: 68551-12-2 NLP: 500-221-7	Linear (C12-C16) alcohol ethoxylate Skin Irrit. 2, H315; Eye Irrit. 2, H319	≤ 2,5%

· Additional information: For the wording of the listed Hazard Statements refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

· After inhalation:

Supply fresh air; consult doctor in case of complaints.

In case of irregular breathing or respiratory arrest provide artificial respiration.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately remove any clothing soiled by the product.

Immediately rinse with water.

If skin irritation or rash occurs: Get medical advice/attention.

· After eye contact:

Remove contact lenses if worn.

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Rinse opened eye for several minutes under running water.

After swallowing:

Rinse mouth with water. Do not induce vomiting. Get medical attention.

A person vomiting while lying on their back should be turned on their side.

4.2 Most important symptoms and effects, both acute and delayed

Dizziness Coughing

Breathing difficulty

Cramp

Thirst

Irritating to eyes and skin.

Allergic reactions

Disorientation

· Hazards: Danger of impaired breathing.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with added, activated carbon.

Contains orange terpenes, d-limonene. May produce an allergic reaction.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

If swallowed or in case of vomiting, danger of entering the lungs.

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray.
- · For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 5.3 Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information: Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

Protect from heat.

Particular danger of slipping on leaked/spilled product.

· 6.2 Environmental precautions

Do not allow product to reach sewage system or any water course.

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Inform respective authorities in case of seepage into water course or sewage system.

Prevent from spreading (e.g. by damming-in or oil barriers).

· 6.3 Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles.

Used rags or other cleaning materials should be soaked with water and placed in a sealed container.

6.4 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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Keep away from heat and direct sunlight.

Prevent formation of aerosols.

Use only in well ventilated areas.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Flammable gas-air mixtures may form in empty receptacles.

7.2 Conditions for safe storage, including any incompatibilities

- · Storage:
- Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

Store in cool, dry conditions in well sealed receptacles.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

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

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · **DNELs:** No further relevant information available.
- · PNECs: No further relevant information available.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

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Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin. Avoid breathing mist/vapours/spray.

· Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation. Use suitable respiratory protective device when aerosol or mist is formed.

For spills, respiratory protection may be advisable.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Eye protection:



Safety glasses

- · Body protection: Protective work clothing
- Limitation and supervision of exposure into the environment:

No further relevant information available.

· Risk management measures: No further relevant information available.

SECTION 9: Physical and chemical properties 9.1 Information on basic physical and chemical properties				
Form:	Liquid			
Colour:	Yellow			
	Orange			
· Odour:	Citrus.			
· Odour threshold:	Not determined.			
· pH-value:	4,5 - 6,0			
Melting point/freezing point:	Not determined.			
Initial boiling point and boiling ran	ge: Not determined.			
· Flash point:	≥51°C (≥123,8 °F)			
· Flammability (solid, gas):	Not applicable.			
· Auto/Self-ignition temperature:	Not determined.			
Decomposition temperature:	Not determined.			
Explosive properties:	Not determined.			
·Explosion limits				
Lower:	Not determined.			
Upper:	Not determined.			
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Oxidising properties	Non-oxidising.	
· Vapour pressure:	Not determined.	
· Density:		
Relative density:	0.86	
Vapour density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in / Miscibility with		
water:	Fully miscible.	
Partition coefficient: n-octanol/	water: Not determined.	
· Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Flammable.

Can react violently with oxygen rich (oxidising) material. Danger of Explosion.

Develops readily flammable gases/fumes.

Reacts with peroxides and other radical forming substances.

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.

Used empty containers may contain product gases which form explosive mixtures with air.

Reacts with strong alkali.

- · 10.4 Conditions to avoid Excessive heat.
- · 10.5 Incompatible materials Oxidisers
- · 10.6 Hazardous decomposition products Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:

5989-27-5 d-limonene

Oral LD50 4400 mg/kg (rat)

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- · Primary irritant effect
- · Skin corrosion/irritation:

Causes skin irritation.

- · Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation:

May cause an allergic skin reaction.

- · Carcinogenic categories
- IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable routes of exposure:

Eye contact.

Inhalation.

Skin contact.

Ingestion.

- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard:

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: Toxic to aquatic life with long lasting effects.
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- · Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

14.1 UN-Number	
DOT	NA1993
ADR, IMDG, IATA	UN1993
14.2 UN proper shipping name	
DOT	Combustible liquid, n.o.s. (d-Limonene, oran- terpenes)
ADR, IMDG	FLAMMABLE LIQUID, N.O.S. (d-Limonene, oran
· - ·	terpenes)
IATA	Flammable liquid, n.o.s. (d-Limonene, oran
	terpenes)
14.3 Transport hazard class(es)	
DOT	
COMBUSTRIE	
Class	3 Flammable liquids.
Label	3
ADR	
Class	3 (F1) Flammable liquids.
Label	3

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· IMDG, IATA



· Class 3 Flammable liquids.

· Label

14.4 Packing group

DOT, ADR, IMDG, IATA

14.5 Environmental hazards:

· Marine pollutant:



· 14.6 Special precautions for user

Warning: Flammable liquids.

Danger code (Kemler):

F-E,S-D

· EMS Number:

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

· Transport/Additional information:

· DOT

Classified as combustible under US DOT regulations. Labeling is only required for single

packages ≥119 US gal / 450 L.

Labeling as a Marine Pollutant is only required for bulk single package shipments. Bulk packaging consists of a maximum capacity of greater than 450 L (119 gallons) for a liquid and a maximum net mass greater than 400 kg (882 pounds) for a solid. (See

171.4(c))

· ADR



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to provisions relevant to marine pollutants. (See 5.2.1.8.1)

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·IMDG



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each.

Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to provisions relevant to marine pollutants. (See 2.10.2.7)

· IATA



Limited Quantity for packages less than 30 kg gross and inner packagings less than 5 L each / 10 L net.

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

- Carcinogenic Categories
- EPA (Environmental Protection Agency)

None of the ingredients are listed.

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IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

- · Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

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

SECTION 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.

· Relevant phrases

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

· Abbreviations and acronyms:

ADR: 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistant, Bio-accumulable, Toxique

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Asp. Tox. 1: Aspiration hazard - Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

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Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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