

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

## 1 Identification

- **Product identifier**
- **Trade name:** CALIFORNIA ORANGE
- **Article number:** C-66
- **Application of the substance / the mixture** Cleaner solvent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
BAF Industries  
8010 Dixie Highway  
Florence, KY 41042  
USA  
phone: 859-372-5900
- **Information department:** msds\_info@prowax.com

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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

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



Xi; Irritant

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



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:**

The product has to be labeled due to the calculation procedure of international guidelines.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Warning

- **Hazard-determining components of labeling:**

d-limonene

- **Hazard statements**

Flammable liquid and vapour.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

**Trade name: CALIFORNIA ORANGE**

(Contd. of page 1)

*Causes skin irritation.**May cause an allergic skin reaction.***· Precautionary statements***If medical advice is needed, have product container or label at hand.**Keep out of reach of children.**Read label before use.**Keep away from heat/sparks/open flames/hot surfaces. - No smoking.**Use explosion-proof electrical/ventilating/lighting/equipment.**Avoid breathing dust/fume/gas/mist/vapors/spray**Wear protective gloves / eye protection / face protection.**Wear protective gloves.**Ground/bond container and receiving equipment.**Keep container tightly closed.**Use only non-sparking tools.**Take precautionary measures against static discharge.**Wash thoroughly after handling.**Contaminated work clothing must not be allowed out of the workplace.**IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.**Specific treatment (see on this label).**Wash contaminated clothing before reuse.**If skin irritation or rash occurs: Get medical advice/attention.**In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.**Take off contaminated clothing and wash it before reuse.**Store in a well-ventilated place. Keep cool.**Dispose of contents/container in accordance with local/regional/national/international regulations.***· Classification system:****· NFPA ratings (scale 0 - 4)**

Health = 1

Fire = 2

Reactivity = 0

**· HMIS-ratings (scale 0 - 4)**

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: Mixtures****· Description:** Mixture of the substances listed below with nonhazardous additions.**· Dangerous components:**

5989-27-5	<i>d-limonene</i> Xi R38-43;  N R50/53 R10 Flam. Liq. 3, H226;  Skin Irrit. 2, H315; Skin Sens. 1, H317	50-100%
-----------	--	---------

(Contd. on page 3)

USA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

Trade name: CALIFORNIA ORANGE

111-76-2	2-butoxyethanol ☒ Xn R20/21/22; ☒ Xi R36/38 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; H227	(Contd. of page 2) 2.5-10%
----------	--	-------------------------------

## 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:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **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:**  
 Do not allow product to reach sewage system or any water course.  
 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).  
 Ensure adequate ventilation.  
 Do not flush with water or aqueous cleansing agents
- **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**  
 Ensure good ventilation/exhaustion at the workplace.  
 Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
 Keep ignition sources away - Do not smoke.  
 Protect against electrostatic charges.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

Trade name: CALIFORNIA ORANGE

(Contd. of page 3)

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **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:**

### 111-76-2 2-butoxyethanol

PEL	Long-term value: 240 mg/m <sup>3</sup> , 50 ppm Skin
REL	Long-term value: 24 mg/m <sup>3</sup> , 5 ppm Skin
TLV	Long-term value: 97 mg/m <sup>3</sup> , 20 ppm BEI

· **Ingredients with biological limit values:**

### 111-76-2 2-butoxyethanol

BEI	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis
-----	--

· **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:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

Trade name: CALIFORNIA ORANGE

(Contd. of page 4)

- **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

· <b>Information on basic physical and chemical properties</b>	
· <b>General Information</b>	
· <b>Appearance:</b>	
Form:	Liquid
Color:	Colorless
Odor:	Fruit-like
Odour threshold:	Not determined.
pH-value:	Not applicable
· <b>Change in condition</b>	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	49 °C (120 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	237 °C (459 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
Lower:	0.7 Vol %
Upper:	6.1 Vol %
Vapor pressure at 20 °C (68 °F):	2.3 hPa (2 mm Hg)
Density at 20 °C (68 °F):	0.852 g/cm <sup>3</sup> (7.11 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
· <b>Solubility in / Miscibility with</b>	
Water:	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b> Not determined.	
· <b>Viscosity:</b>	
Dynamic:	Not determined
Kinematic:	Not determined.
· <b>Solvent content:</b>	
Organic solvents:	96.0 %
VOC content:	96.0 %
Solids content:	3.7 %

(Contd. on page 6)

USA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

Trade name: CALIFORNIA ORANGE

(Contd. of page 5)

· **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:**

5989-27-5 *d-limonene*

Oral	LD50	4400 mg/kg (rat)
------	------	------------------

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

*The product shows the following dangers according to internally approved calculation methods for preparations:*

*Irritant*

- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

5989-27-5	<i>d-limonene</i>	3
111-76-2	<i>2-butoxyethanol</i>	3

· **NTP (National Toxicology Program)**

*None of the ingredients is listed.*

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

*None of the ingredients is listed.*

## 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 (Self-assessment): 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.*

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

**Trade name: CALIFORNIA ORANGE**

(Contd. of page 6)

*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**

NA1993

UN1993

**· UN proper shipping name**

**· DOT**

**· ADR**

COMBUSTIBLE LIQUID, N.O.S (Dipentene)

1993 Flammable liquids, n.o.s. (Dipentene), ENVIRONMENTALLY HAZARDOUS

FLAMMABLE LIQUID, N.O.S. (DIPENTENE)

**· IMDG, IATA**

**· Transport hazard class(es)**

**· DOT**



**· Class**

3 Combustible liquids

**· Label**

3

**· ADR**



**· Class**

3 Combustible liquids

**· Label**

3

**· IMDG, IATA**



**· Class**

3 Combustible liquids

**· Label**

3

**· Packing group**

**· DOT, ADR, IMDG, IATA**

III

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

Trade name: CALIFORNIA ORANGE

(Contd. of page 7)

· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	Yes (DOT)
· <b>Special marking (ADR):</b>	Symbol (fish and tree)
· <b>Special precautions for user</b>	Warning: Combustible liquids
· <b>Danger code (Kemler):</b>	30
· <b>EMS Number:</b>	F-E,S-E
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L
· <b>Remarks:</b>	Special marking with the symbol (fish and tree).
· <b>ADR</b>	
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN1993, Flammable liquids, n.o.s. (Dipentene), ENVIRONMENTALLY HAZARDOUS, 3, III

## 15 Regulatory information

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

### · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

### · Section 313 (Specific toxic chemical listings):

111-76-2 | 2-butoxyethanol

- TSCA (Toxic Substances Control Act) All ingredients are listed
- Proposition 65

### · Chemicals known to cause cancer:

None of the ingredients is listed.

### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

### · Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

### · Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

### · Carcinogenic categories

#### · EPA (Environmental Protection Agency)

111-76-2 | 2-butoxyethanol

NL

(Contd. on page 9)

USA



# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

Trade name: CALIFORNIA ORANGE

(Contd. of page 8)

· <b>TLV (Threshold Limit Value established by ACGIH)</b>	
111-76-2 2-butoxyethanol	A3

· <b>NIOSH-Ca (National Institute for Occupational Safety and Health)</b>
None of the ingredients is listed.

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Warning

- **Hazard-determining components of labeling:**

*d-limonene*

- **Hazard statements**

*Flammable liquid and vapour.*

*Causes skin irritation.*

*May cause an allergic skin reaction.*

- **Precautionary statements**

*If medical advice is needed, have product container or label at hand.*

*Keep out of reach of children.*

*Read label before use.*

*Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*

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

*Avoid breathing dust/fume/gas/mist/vapors/spray*

*Wear protective gloves / eye protection / face protection.*

*Wear protective gloves.*

*Ground/bond container and receiving equipment.*

*Keep container tightly closed.*

*Use only non-sparking tools.*

*Take precautionary measures against static discharge.*

*Wash thoroughly after handling.*

*Contaminated work clothing must not be allowed out of the workplace.*

*IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*Specific treatment (see on this label).*

*Wash contaminated clothing before reuse.*

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

*In case of fire: Use for extinction: CO2, powder or water spray.*

*Take off contaminated clothing and wash it before reuse.*

*Store in a well-ventilated place. Keep cool.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 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.*

- **Date of preparation / last revision** 04/06/2015 / 7

- **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)*

*ICAO: International Civil Aviation Organisation*

*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*

(Contd. on page 10)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 04/06/2015

Reviewed on 04/06/2015

**Trade name: CALIFORNIA ORANGE**

(Contd. of page 9)

*DOT: US Department of Transportation*  
*IATA: International Air Transport Association*  
*ACGIH: American Conference of Governmental Industrial Hygienists*  
*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)*  
*VOC: Volatile Organic Compounds (USA, EU)*  
*LC50: Lethal concentration, 50 percent*  
*LD50: Lethal dose, 50 percent*  
*Flam. Liq. 3: Flammable liquids, Hazard Category 3*  
*: Flammable liquids, Hazard Category 4*  
*Acute Tox. 4: Acute toxicity, Hazard Category 4*  
*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*  
*Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2*  
*Skin Sens. 1: Sensitisation - Skin, Hazard Category 1*

· **\* Data compared to the previous version altered.**

USA