

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

1 Identification

- **Product identifier**
- **Trade name:** Mighty Orange
- **Article number:** 0514 JL
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Jamson Laboratories, Inc.
101 South Bayview Blvd.
Oldsmar, FL 34677
USA
- **Information department:** Product Safety Department
- **Emergency telephone number:** ChemTel Inc. (800) 255-3924 Intl. +01 (813) 248-0585



2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

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

- **Label elements**

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

- **Hazard pictograms**



GHS05



GHS07

- **Signal word** Danger

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

- *d-Limonene (Citrus Terpenes)*

- **Hazard statements**

- *Causes severe skin burns and eye damage.*

- *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.*

- *Do not breathe dust/fume/gas/mist/vapours/spray.*

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

- *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

- *Continue rinsing.*

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: Mighty Orange

(Contd. of page 1)

Specific treatment (see on this label).

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **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:**

111-76-2	2-butoxyethanol	2.5-10%
1310-73-2	sodium hydroxide	≤ 2.5%
94266-47-4	d-Limonene (Citrus Terpenes)	≤ 2.5%

4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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:**

Remove contact lenses if able to do so.

Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Do not induce vomiting; immediately call for medical help.

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

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

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

Corrosive and extremely irritating to all tissues.

Allergic reactions

Nausea

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: Mighty Orange

(Contd. of page 2)

- Cramp
- Gastric or intestinal disorders
- **Danger**
- Danger of impaired breathing.
- Danger of gastric perforation.
- **Indication of any immediate medical attention and special treatment needed**
- Treat skin and mucous membrane with antihistamine and corticoid preparations.

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:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
- Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
- Dilute with plenty of water.
- 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).
- Use neutralizing agent.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.
- **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

- **Precautions for safe handling**
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
- Unsuitable material for receptacle: aluminium.
- Unsuitable material for receptacle: glass or ceramic.
- **Information about storage in one common storage facility:**
- Do not store together with acids.
- Store away from oxidizing agents.
- Store away from foodstuffs.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: **Mighty Orange**

(Contd. of page 3)

· **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 ³ , 50 ppm Skin
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REL	Long-term value: 24 mg/m ³ , 5 ppm Skin
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TLV	Long-term value: 97 mg/m ³ , 20 ppm BEI
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1310-73-2 sodium hydroxide

PEL	Long-term value: 2 mg/m ³
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REL	Ceiling limit value: 2 mg/m ³
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TLV	Ceiling limit value: 2 mg/m ³
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· **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
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· **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 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.

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

· **Material of gloves**

Neoprene gloves

Nitrile rubber, NBR

Butyl rubber, BR

(Contd. on page 5)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: **Mighty Orange**

(Contd. of page 4)

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.

- **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.

- **Not suitable are gloves made of the following materials:** Leather gloves

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Alkaline resistant protective clothing

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Orange
Odor:	Citrus
Odour threshold:	Not determined.

- **pH-value at 20 °C (68 °F):** 13.8

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**

Decomposition temperature: Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapor pressure:** Not determined.

- **Density at 20 °C (68 °F):** 1.03 g/cm³ (8.595 lbs/gal)

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with**

Water: Fully miscible.

- **Partition coefficient (n-octanol/water):** Not determined.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: **Mighty Orange**

(Contd. of page 5)

- | | |
|----------------------------|--|
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 4.3 % |
| Water: | 92.4 % |
| VOC content: | 4.3 % |
| | 44.0 g/l / 0.37 lb/gl |
| · Solids content: | |
| | 3.3 % |
| · 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**
 Reacts with strong oxidizing agents.
 Corrodes aluminium.
 Reacts with acids.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
 Sodium Oxides
 Carbon monoxide and carbon dioxide

11 Toxicological information

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

· LD/LC50 values that are relevant for classification:		
1310-73-2 sodium hydroxide		
Oral	LD50	2000 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** Sensitizing effect through inhalation is possible with prolonged exposure.

- **Additional toxicological information:**

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

Harmful

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
111-76-2	2-butoxyethanol	3

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: **Mighty Orange**

(Contd. of page 6)

· **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.

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· **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.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**

· **DOT, IMDG, IATA**

UN3266

· **UN proper shipping name**

· **DOT**

· **IMDG, IATA**

Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide)

CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)

(Contd. on page 8)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: **Mighty Orange**

(Contd. of page 7)

· **Transport hazard class(es)**· **DOT**

· **Class** 8 Corrosive substances
 · **Label** 8

· **IMDG, IATA**

· **Class** 8 Corrosive substances
 · **Label** 8

· **Packing group**· **DOT, IMDG, IATA** III· **Environmental hazards:**· **Marine pollutant:** No· **Special precautions for user**· **Danger code (Kemler):** 80· **EMS Number:** F-A,S-B· **Segregation groups** Alkalis

· **Transport in bulk according to Annex II of
 MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**· **DOT**

· **Quantity limitations** On passenger aircraft/rail: 5 L
 On cargo aircraft only: 60 L

· **IMDG**· **Limited quantities (LQ)** 5L

· **Excepted quantities (EQ)** Code: E1
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":** UN3266, Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide), 8, 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.

(Contd. on page 9)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: **Mighty Orange**

(Contd. of page 8)

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

111-76-2	2-butoxyethanol
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· **TSCA (Toxic Substances Control Act):**

111-76-2	2-butoxyethanol
1310-73-2	sodium hydroxide
6834-92-0	disodium metasilicate
151-21-3	sodium dodecyl sulphate
66455-15-0	C10-12 6 Mole Linear Alcohol Ethoxylate
64-02-8	tetrasodium ethylenediaminetetraacetate
7732-18-5	water, distilled, conductivity or of similar purity

· **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
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· **TLV (Threshold Limit Value established by ACGIH)**

111-76-2	2-butoxyethanol	A3
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

· **Hazard pictograms**



GHS05 GHS07

· **Signal word** *Danger*

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

d-Limonene (Citrus Terpenes)

· **Hazard statements**

Causes severe skin burns and eye damage.

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.

Do not breathe dust/fume/gas/mist/vapours/spray.

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/03/2014

Reviewed on 01/21/2014

Trade name: Mighty Orange

(Contd. of page 9)

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

Store locked up.

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.

· **Department issuing MSDS:** Environment protection department.

· **Date of preparation / last revision**

11/03/2014 / -

01/21/2014

· **Abbreviations and acronyms:**

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

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

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1