

Version 1.1

Revision Date 11/10/2015

Print Date 04/10/2017

ZepInc

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name	:	ZEP BIG ORANGE (AEROSOL) 1 DZ
Material number	:	0000000000011401
Manufacturer or supplier's d	eta	ils
Company	:	Zep Inc.
Address	:	1310 Seaboard Industrial Blvd., NW Atlanta, GA 30318
Telephone	:	404-352-1680

Emergency telephone numbers		
For SDS Information	:	Compliance Services 1-877-428-9937
For a Medical Emergency	:	877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency	:	CHEMTREC: 800-424-9300 - All Calls Recorded. In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	Aerosol containing a liquefied gas
Colour	clear, colourless
Odour	characteristic

GHS Classification

Flammable aerosols Gases under pressure Skin irritation Eye irritation Skin sensitisation	 Category 1 Liquefied gas Category 2 Category 2A Category 1
GHS Label element	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 H222 Extremely flammable aerosol. H280 Contains gas under pressure; may explode if heated. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.
Precautionary statements	 Prevention: P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P211 Do not spray on an open flame or other ignition source.



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	 P251 Pressurized container: Douse. P261 Avoid breathing dust/fume P264 Wash skin thoroughly afte P272 Contaminated work clothing the workplace. P280 Wear eye protection/face P280 Wear protective gloves. Response: P302 + P352 IF ON SKIN: Was P305 + P351 + P338 IF IN EYE for several minutes. Remove construction P333 + P313 If skin irritation or advice/ attention. P362 Take off contaminated clopside Storage: P410 + P412 Protect from sunling temperatures exceeding 50 °C/ Disposa I: Dispose of contents/container in regulation. 	e/ gas/ mist/ vapours/ spray. r handling. ng should not be allowed out of protection. h with plenty of soap and water. S: Rinse cautiously with water ntact lenses, if present and rash occurs: Get medical risists: Get medical advice/ thing and wash before reuse. ght. Do not expose to 122 °F.
Potential Health Effects		
Carcinogenicity: IARC	No component of this product prese equal to 0.1% is identified as probal	
ACGIH	human carcinogen by IARC. No component of this product prese equal to 0.1% is identified as a carc carcinogen by ACGIH.	
OSHA	No component of this product prese equal to 0.1% is identified as a carc carcinogen by OSHA.	
NTP	No component of this product prese equal to 0.1% is identified as a know by NTP.	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

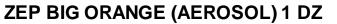
Substance / Mixture

: Mixture

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
Citrus, ext.	94266-47-4	>= 70 - < 90
propane	74-98-6	>= 5 - < 10
butane	106-97-8	>= 5 - < 10
Alcohols, C9-11, ethoxylated	68439-46-3	>= 1 - < 5
Alcohols, C12-16, ethoxylated	68551-12-2	>= 1 - < 5

The exact percentages of disclosed substances are withheld as trade secrets.





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SECTION 4. FIRST AID MEASURES

General advice	Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.	
If inhaled	 If unconscious place in recovery position and seek medical advice. Consult a physician after significant exposure. 	
In case of skin contact	 If on clothes, remove clothes. Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician. 	
In case of eye contact	 Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. Rinse immediately with plenty of water for at least 15 minutes. 	
If swallowed	 Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Take victim immediately to hospital. 	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical Water spray jet	
Unsuitable extinguishing media	High volume water jet	
Specific hazards during firefighting	Do not allow run-off from fire fighting to enter drains or wate courses.	٢
Hazardous combustion products	: Carbon dioxide (CO2) Carbon monoxide Smoke	
Specific extinguishing methods	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Further information	 For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers. Collect contaminated fire extinguishing water separately. The must not be discharged into drains. 	nis
Special protective equipment	: Wear self-contained breathing apparatus for firefighting if	



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for firefighters

necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	 Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions	 Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up or vacuum up spillage and collect in suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	 Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Do not breathe vapours or spray mist. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. Always replace cap after use.
Conditions for safe storage	 BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. No smoking. Keep in a cool, well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	: Store and keep away from, oxidizing agents and acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis



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		(Form of exposure)	parameters / Permissible concentration	
propane	74-98-6	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,800 mg/m3	NIOSH REL
		TWA	1,000 ppm 1,800 mg/m3	OSHA Z-1
		TWA	1,000 ppm 1,800 mg/m3	OSHA P0
butane	106-97-8	TWA	800 ppm 1,900 mg/m3	NIOSH REL
		TWA	800 ppm 1,900 mg/m3	OSHA P0

Personal protective equipment

Respiratory protection	:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Hand protection Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Ensure that eyewash stations and safety showers are close to the workstation location. Tightly fitting safety goggles
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Aerosol containing a liquefied gas
Colour	: clear, colourless
Odour	: characteristic
Odour Threshold	: No data available
pH	: Not applicable
Melting point/freezing point	: No data available
Boiling point	: not determined
Flash point	:
	No data available
Evaporation rate	: No data available



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Flammability (solid, gas)	: Extremely flammable aerosol.	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapour pressure	: not determined	
Relative vapour density	: No data available	
Density	: 0.859 g/cm3	
Solubility(ies)		
Water solubility	: emulsifiable	
Solubility in other solvents	: not determined	
Auto-ignition temperature	: not determined	
Thermal decomposition	: No data available	
Viscosity		
Viscosity, kinematic	: No data available	
Heat of combustion	: > 30 kJ/g	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
reactions	Vapours may form explosive mixture with air.
Conditions to avoid	: Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	: Acids Oxidizing agents
Hazardous decomposition products	: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:	
Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method

Components:



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propane:	
	LC50 Mouse: 1,237 mg/l Exposure time: 2 h
	LC50 Rat: 658 mg/l Exposure time: 4 h
	LC50 Rat: 1,355 mg/l
butane: Acute inhalation toxicity :	LC50 Mouse: 1,237 mg/l Exposure time: 2 h
	LC50 Rat: 1,355 mg/l
Alcohols, C9-11, ethoxylated: Acute oral toxicity :	LD50 Oral Rat: 1,400 mg/kg
Skin corrosion/irritation	
Product:	
Remarks: May cause skin irritatio	n and/or dermatitis.
Serious eye damage/eye irritation	
Product:	
Remarks: Irritating to eyes.	
Respiratory or skin sensitisation	
Product:	
Remarks: Causes sensitisation.	
Germ cell mutagenicity	
No data available	
Carcinogenicity	
No data available	
Reproductive toxicity	
No data available	
Citrus, ext.: propane: butane: Alcohols, C9-11, ethoxylated: Alcohols, C12-16, ethoxylated:	
STOT - single exposure	
No data available	
STOT repeated expective	

STOT - repeated exposure



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No data available

Aspiration toxicity

No data available

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

No data available Bioaccumulative potential

<u>Components:</u> butane :

Partition coefficient: n- : Pow: 2.89

octanol/water

Mobility in soil

No data available

Other adverse effects

No data available

Product:Regulation40 CFR Protection of Environment; Part 82 Protection of
Stratospheric Ozone - CAA Section 602 Class I
SubstancesRemarksSubstancesRemarksThis product neither contains, nor was manufactured
with a Class I or Class II ODS as defined by the U.S.
Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A
+ B).Additional ecological
information: An environmental hazard cannot be excluded in the
event of unprofessional handling or disposal., Very toxic

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	: Dispose of in accordance with local regulations. The product should not be allowed to enter drains, water courses or the soil.

to aquatic life.



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	Do not contaminate ponds, waterways chemical or used container.	s or ditches with
Contaminated packaging	 Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on 	, the empty drum.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): ORM-D, CONSUMER COMMODITY

Transportation Regulation: IMDG (Vessel): UN1950, AEROSOLS, 2.1, - Limited quantity

Transportation Regulation: IATA (Cargo Air): UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: IATA (Passenger Air): UN1950, Aerosols, flammable, 2.1, - Limited quantity

Transportation Regulation: TDG (Canada): UN1950, AEROSOLS, 2.1, - Limited quantity

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	Sudden Release of Pressure Hazard Fire Hazard Acute Health Hazard
SARA 302	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
California Prop 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.



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The components of this product are reported in the following inventories:

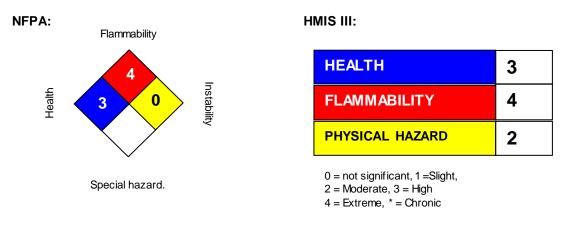
TSCA DSL	On TSCA Inventory
DSL	All components of this product are on the Canadian DSL
AICS	On the inventory, or in compliance with the inventory
NZIoC	Not in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory

Inventory Acronym and Validity Area Legend:

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information



OSHA GHS Label Information:

Hazard pictograms	
Signal w ord	: Danger:
Hazard statements	 Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
Precautionary statements	:
	 Prevention: Keep aw ay from heat/sparks/open flames/hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing dust/fume/gas/mist/ vapours/spray. Wash skin thoroughly after handling. Contaminated w ork clothing should not be allow ed out of the w orkplace. Wear eye protection/face protection. Wear protective gloves. Response: IF ON SKIN: Wash with plenty of soap and w ater. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Take off contaminated clothing and w ash before reuse. Stor age: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
	Disposal: Dispose of contents/container in accordance with local regulation.

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