Printing date 04/05/2021 Reviewed on 04/05/2021

1 Identification

· Product identifier

· Trade name: Aerosol Solution

· Article number: 131-16

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: OFI Testing Equipment Inc. 11302 Steeplecrest Dr. Houston, TX 77065 (877) 837-8683

· Information department:

tech services @o fite.com

Technical Coordinator

Sherman Nelson sherman@aquasolutions.org

· Emergency telephone number:

Chemtrec: 800-424-9300 Canutec: 613-996-6666

#### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Flam. Liq. 4 H227 Combustible liquid.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labeling:

dioctyl sulfosuccinate sodium salt

· Hazard statements

Combustible liquid.

Causes skin irritation.

Causes serious eye damage.

· Precautionary statements

*Keep away from flames and hot surfaces. – No smoking.* 

Wash thoroughly after handling.

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

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

*Immediately call a poison center/doctor.* 

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

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

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 = 3Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- Fire = 1
- · 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:			
CAS: 111-76-2	2-butoxyethanol	15.0%	
CAS: 577-11-7	dioctyl sulfosuccinate sodium salt	10.36%	
· ·	zardous Ingredients		
CAS: 7732-18-5	Water	73.52%	
CAS: 64-17-5	Ethyl Alcohol, Absolute 200 Proof	0.91%	
CAS: 104-76-7	2-Ethyl-1-hexanol	0.13%	
CAS: 67-64-1	Acetone	0.08%	

#### 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: 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. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.

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(Contd. of page 2)

- · 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:

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: 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 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.

· Protective Action Criteria for Chemicals

· PAC-1:	
CAS: 111-76-2 2-butoxyethanol	60 ppm
CAS: 577-11-7 dioctyl sulfosuccinate sodium salt	$5.7 \text{ mg/m}^3$
CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	1,800 ppm
CAS: 104-76-7 2-Ethyl-1-hexanol	0.1 ppm
CAS: 67-64-1 Acetone	200 ppm
· PAC-2:	•
CAS: 111-76-2 2-butoxyethanol	120 ppm
CAS: 577-11-7 dioctyl sulfosuccinate sodium salt	63 mg/m <sup>3</sup>
CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	3300* ppn
CAS: 104-76-7 2-Ethyl-1-hexanol	100 ppm
CAS: 67-64-1 Acetone	3200* ppn
· PAC-3:	
CAS: 111-76-2 2-butoxyethanol	700 ppm
CAS: 577-11-7 dioctyl sulfosuccinate sodium salt	$380 \text{ mg/m}^3$
CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof	15000* ppn
CAS: 104-76-7 2-Ethyl-1-hexanol	200 ppm

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CAS: 67-64-1 Acetone (Contd. of page 3)
5700\* ppm

#### 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · 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:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

#### CAS: 111-76-2 2-butoxyethanol

PEL Long-term value: 240 mg/m³, 50 ppm

Skin

REL Long-term value: 24 mg/m³, 5 ppm

Skin

TLV Long-term value: 97 mg/m³, 20 ppm

BEI

#### · Ingredients with biological limit values:

#### CAS: 111-76-2 2-butoxyethanol

BEI 200 mg/g creatinine

LD50 Intraperitoneal: urine

Time: end of shift

LD50: 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: Not required.

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# Safety Data Sheet acc. to OSHA HCS

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Trade name: Aerosol Solution

#### · 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.

· 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

· Body protection: Protective work clothing

#### 9 Physical and chemical properties

•	Inform	iatio	n c	on basic	pnysical	ana	cnemical	properties

· General Information

· Appearance:

Form: Liquid Color: Clear

Odor: undistinguishableOdor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range:Undetermined.Boiling point/Boiling range:Undetermined.

• Flash point:  $67 \,^{\circ}C \, (152.6 \,^{\circ}F)$ 

· Flammability (solid, gaseous): Not applicable.

• Ignition temperature:  $240 \, ^{\circ}C \, (464 \, ^{\circ}F)$ 

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

Danger of explosion: Not determined.

· Explosion limits:

 Lower:
 1.1 Vol %

 Upper:
 10.6 Vol %

• Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

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		(Contd. of pag
Density:	Not determined.	
Relative density	Not determined.	
· Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	16.1 %	
Water:	73.5 %	
VOC content:	16.04 %	
	160.4 g/l / 1.34 lb/gal	
Solids content:	0.0 %	
Other information	No further relevant information available.	

## 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · 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:

# ATE (Acute Toxicity Estimate) Oral LD50 5,867 mg/kg (rat) Dermal LD50 7,067 mg/kg (rab) Inhalative LC50/4h 73.3 mg/l

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

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· Carcinogenic categories			
· IARC (International Agency for Research on Cancer)			
CAS: 111-76-2	2 2-butoxyethanol	3	
CAS: 64-17-5	Ethyl Alcohol, Absolute 200 Proof	1	
· 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.
- · 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.

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

Danger to drinking water if even small quantities leak into the ground.

- · 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.

· UN-Number		
· DOT, ADN, IMDG, IATA	Not regulated	
· UN proper shipping name		
· DOT, ADN, IMDG, IATA	Not regulated	
· Transport hazard class(es)		
DOT, ADN, IMDG, IATA		
· Class	Not regulated	

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		(Contd. of page 7
· Packing group · DOT, IMDG, IATA	Not regulated	
· Environmental hazards:		
· Marine pollutant:	No	
· Special precautions for user	Not applicable.	
· Transport in bulk according to Annex II o	f	
MARPOL73/78 and the IBC Code	Not applicable.	
· UN ''Model Regulation'':	Not regulated	

## 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section 355 (extremely hazardous substances):	1
None of the ingredients is listed.	1

- · Section 313 (Specific toxic chemical listings):
- CAS: 111-76-2 2-butoxyethanol
- · TSCA (Toxic Substances Control Act):

Water	ACTIVE
2-butoxyethanol	ACTIVE
dioctyl sulfosuccinate sodium salt	ACTIVE
Ethyl Alcohol, Absolute 200 Proof	ACTIVE
2-Ethyl-1-hexanol	ACTIVE
Acetone	ACTIVE

· Hazardous Air Pollutants

None of the ingredients is 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:

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

· Carcinogenic categories

· EPA (Environmental Protection Agency)		
CAS: 111-76-2	2-butoxyethanol	NL
CAS: 67-64-1	Acetone	I
mxx//mi 1 11x 9 1x 1 1		

· TLV (Threshold Limit Value)

CAS: 111-76-2 2-butoxyethanol A3

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CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof A3

CAS: 67-64-1 Acetone A4

#### · 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



- · Signal word Danger
- · Hazard-determining components of labeling:

dioctyl sulfosuccinate sodium salt

· Hazard statements

Combustible liquid.

Causes skin irritation.

Causes serious eye damage.

· Precautionary statements

Keep away from flames and hot surfaces. - No smoking.

Wash thoroughly after handling.

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

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

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

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.

- · Department issuing SDS: Environment protection department.
- · Contact:
- · Date of preparation / last revision

Revision 0.0, 03-17-2021: Creation date for SDS. STN

Review date for SDS 07-19-2017. STN

04/05/2021 / 1.0

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

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HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit

Flam. Liq. 4: Flammable liquids – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1

\* Data compared to the previous version altered.

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