

WHIRLAWAY AEROSOL 12-19OZ

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name : WHIRLAWAY AEROSOL 12-19OZ
DIN ID # : 1995782
Material number : 267101C

Manufacturer or supplier's details

Company : Zep Inc.
Address : 11627 - 178 Street
Edmonton, Alberta T5S 1N6
Canada
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.

Recommended use of the chemical and restrictions on use

Recommended use : Cleaner

This product is regulated under the Canadian Federal Food and Drug Regulations of Health Canada. The warnings presented below in this Safety Data Sheet (SDS) comply with the WHMIS 2015 Hazardous Products Regulation (GHS - Globally Harmonized System of Classification and Labeling). The requirements for the labeling and warnings of product regulated under the Canadian Federal Food and Drug Regulations of Health Canada may differ from those required for GHS based hazard communication.

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	Aerosol containing a liquefied gas
Colour	No data available
Odour	No data available

GHS Classification

Flammable aerosols : Category 2
Gases under pressure : Liquefied gas
Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 4
Eye irritation : Category 2A




GHS label elements

WHIRLAWAY AEROSOL 12-19OZ

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

Hazard pictograms	:	  
Signal word	:	Warning
Hazard statements	:	H223 Flammable aerosol. H280 Contains gas under pressure; may explode if heated. H302 + H332 Harmful if swallowed or if inhaled H319 Causes serious eye irritation.
Precautionary statements	:	Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear eye protection/ face protection. Response: P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention. Storage: P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Disposal: Dispose of contents/container in accordance with local regulation.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
2-butoxyethanol	111-76-2	>= 1 - < 5
butane	106-97-8	>= 1 - < 5
tetrasodium ethylenediaminetetraacetate	64-02-8	>= 1 - < 5
propan-2-ol	67-63-0	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

WHIRLAWAY AEROSOL 12-190Z

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

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.
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing and shoes.
Wash contaminated clothing before reuse.
Wash off immediately with plenty of water for at least 15 minutes.
If skin irritation persists, call a physician.
- In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
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.
- Most important symptoms and effects, both acute and delayed : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms may include irritation, redness, pain, and rash.
Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness.
Harmful if swallowed or if inhaled
Causes serious eye irritation.
Review section 2 of SDS to see all potential hazards.
- Notes to physician : Treat symptomatically. Symptoms may be delayed.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Unsuitable extinguishing media : Do NOT use water jet.
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Smoke
Nitrogen oxides (NO_x)
- Specific extinguishing : Use extinguishing measures that are appropriate to local

WHIRLAWAY AEROSOL 12-19OZ

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

- methods : 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.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if 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.
Keep people away from and upwind of spill/leak.
- 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 : Wipe up with absorbent material (e.g. cloth, fleece).
-

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.
- 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 container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Oxidizing agents
-

WHIRLAWAY AEROSOL 12-19OZ

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-butoxyethanol	111-76-2	TWA	20 ppm 97 mg/m ³	CA AB OEL
		TWA	20 ppm	CA BC OEL
		TWAEV	20 ppm 97 mg/m ³	CA QC OEL
butane	106-97-8	TWA	20 ppm	ACGIH
		TWA	1,000 ppm	CA AB OEL
		TWA	600 ppm	CA BC OEL
		STEL	750 ppm	CA BC OEL
		TWAEV	800 ppm 1,900 mg/m ³	CA QC OEL
propan-2-ol	67-63-0	TWA	200 ppm 492 mg/m ³	CA AB OEL
		STEL	400 ppm 984 mg/m ³	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	400 ppm	CA BC OEL
		TWAEV	400 ppm 983 mg/m ³	CA QC OEL
		STEV	500 ppm 1,230 mg/m ³	CA QC OEL
		TWA	200 ppm	ACGIH
STEL	400 ppm	ACGIH		

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200 mg/g Creatinine	ACGIH BEI
PROPAN-2-OL	67-63-0	Acetone	Urine	End of shift at end of workweek	40 mg/l	ACGIH BEI

Engineering measures : effective ventilation in all processing areas

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

WHIRLAWAY AEROSOL 12-19OZ

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

Material	: Protective gloves
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. Safety glasses
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	: No data available
Odour	: No data available
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point	: 100 °C
Flash point	: -104.4 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 0.922 g/cm ³
Bulk density	: No data available
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: not determined
Partition coefficient: n-octanol/water	: No data available

WHIRLAWAY AEROSOL 12-19OZ

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

Auto-ignition temperature : 230 °C
Thermal decomposition : No data available
Viscosity
Viscosity, kinematic : No data available

SECTION 10. STABILITY AND REACTIVITY

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

SECTION 11. TOXICOLOGICAL INFORMATION**Potential Health Effects**

Aggravated Medical Condition : None known.
Symptoms of Overexposure : Effects are dependent on exposure (dose, concentration, contact time).
Effects are immediate and delayed.
Symptoms may include irritation, redness, pain, and rash.
Symptoms may include central nervous system depression, resulting in headache, nausea and/or dizziness.

Carcinogenicity:**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

Confirmed animal carcinogen with unknown relevance to humans

2-butoxyethanol

111-76-2

Acute toxicity**Product:**

WHIRLAWAY AEROSOL 12-19OZ

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

Acute oral toxicity : Acute toxicity estimate : 817.89 mg/kg
Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate : 3.12 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : 2,289 mg/kg
Method: Calculation method

Components:**propan-2-ol:**

Acute oral toxicity : LD50 Oral Rat: 4,396 mg/kg
Method: Calculation method

Skin corrosion/irritation**Product:**

Remarks: May irritate skin.

Serious eye damage/eye irritation**Product:**

Remarks: Severe eye irritation

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

2-butoxyethanol:**butane:****tetrasodium ethylenediaminetetraacetate:****propan-2-ol:****STOT - single exposure**

No data available

STOT - repeated exposure

No data available

Aspiration toxicity

No data available

Further information

WHIRLAWAY AEROSOL 12-190Z

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

Product:Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Product:**

Partition coefficient: n-octanol/water : Remarks: No data available

Components:**butane :**

Partition coefficient: n-octanol/water : Pow: 2.89

Mobility in soil

No data available

Other adverse effects

No data available

Product:Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of in accordance with local regulations.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 (TDG) / Règlement Pour Le Transport (TMD): (Canada):
--

WHIRLAWAY AEROSOL 12-190Z

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

 Transportation Regulation / Règlement Pour Le Transport: IMDG (Vessel):
 UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

 Transportation Regulation / Règlement Pour Le Transport: IATA (Cargo Air):
 UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

 Transportation Regulation / Règlement Pour Le Transport: IATA (Passenger Air):
 UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

 Transportation Regulation / Règlement Pour Le Transport: 49 CFR (USA):
 UN1950, AEROSOLS, FLAMMABLE, 2.1, - Limited quantity

The product as delivered to the customer conforms to packaging requirements for shipment by road under Transport Dangerous Goods (TDG) Canada regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

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

TSCA On TSCA Inventory
DSL All components of this product are on the Canadian DSL

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION

WHMIS - GHS Label Information:

Hazard pictograms :



Signal word :

Warning:

Hazard statements :

Flammable aerosol. Contains gas under pressure; may explode if heated. Harmful if

WHIRLAWAY AEROSOL 12-19OZ

Version 1.0

Revision Date 04/25/2017

Print Date 09/27/2017

Precautionary statements : sw allowed or if inhaled Causes serious eye irritation.

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye protection/ face protection.

Response: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

Storage: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal: Dispose of contents/container in accordance with local regulation.

Version:	1.0
Revision Date:	04/25/2017
Print Date:	09/27/2017

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. Users should make their own investigations to determine the suitability and applicability of the information for their particular purposes. This SDS has been prepared by the Compliance Services organization supporting this manufacturer, supplier or distributor.

Zep Inc. markets products under well recognized and established brand names such as Zep®, Zep Commercial®, Zep Professional®, Enforcer®, National Chemical™, Selig™, Misty®, Next Dimension™, Petro®, i-Chem®, TimeMist®, TimeWick™, MicrobeMax®, Country Vet®, Konk®, Original Bike Spirits®, Blue Coral®, Black Magic®, Rain-X®, Niagara National™, FC Forward Chemicals®, Rexodan®, Mykal™, and a number of private labeled brands.