

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Reviewed on 05/06/2015

1 Identification

- **Product identifier**

- **Trade name: EcoSpray ZV-2**

- **Product description**

Zero VOC hand wipe degreaser

Product Name	Part No.	Packaging
ECO SPRAY ZV-2	401-55	55 Gal Drum
ECO SPRAY ZV-2	401-5	5 Gal Pail
ECO SPRAY ZV-2	401-1	4 x 1 Gal Case

- **Application of the substance | the mixture** Zero VOC Cleaner/Degreaser

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Ecolink
 2177 Flintstone Drive, Ste. A
 Tucker, GA 30084
www.ecolink.com
 800-886-8240 or 770-621-8240 (8-5 EST)

email: info@ecolink.com

- **Emergency telephone number:**

Inside the U.S.: 800-535-5053 (INFOTRAC, 24 HOURS)
 Outside the U.S.: 352-323-3500 (INFOTRAC, 24 HOURS)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements**

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

- **Hazard pictograms**



GHS02



GHS07

- **Signal word** Danger

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Trade name: EcoSpray ZV-2**· Hazard-determining components of labeling:**

Acetone

· Hazard statements*Highly flammable liquid and vapor.**Causes serious eye irritation.**May cause drowsiness or dizziness.***· Precautionary statements***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.**Use only outdoors or in a well-ventilated area.**Wear protective gloves / eye protection / face protection.**Wear eye protection / face protection.**Ground/bond container and receiving equipment.**Use only non-sparking tools.**Take precautionary measures against static discharge.**Wash thoroughly after handling.**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.**IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**Call a poison center/doctor if you feel unwell.**If eye irritation persists: Get medical advice/attention.**In case of fire: Use for extinction: CO2, powder or water spray.**Store locked up.**Store in a well-ventilated place. Keep container tightly closed.**Store in a well-ventilated place. Keep cool.**Dispose of contents/container in accordance with local/regional/national/international regulations.***· Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme****· HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

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Trade name: EcoSpray ZV-2

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous Components:**

CAS: 107-46-0	Hexamethyldisiloxane	25-50%
RTECS: JM 9237000	Flam. Liq. 2, H225	
CAS: 107-51-7	Octamethyltrisiloxane	25-50%
	Flam. Liq. 3, H226	
CAS: 67-64-1	Acetone	15-35%
RTECS: AL 3150000	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

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

Supply fresh air; consult doctor in case of complaints.

In case of unconsciousness, place patient securely on side position for transportation.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:**

Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting.

If vomiting does occur, repeat fluid administration

If symptoms develop and/or persist, seek medical attention.

- **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, sand, extinguishing powder. Do not use water. Regular foam, water fog, carbon dioxide or dry chemical.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **Special hazards arising from the substance or mixture**

If incinerated product will release the following toxic fumes: Carbon Oxides.

- **Advice for firefighters** Use water spray to cool unopened containers.

- **Protective equipment:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

Keep people at a distance and stay upwind.

Avoid contact with skin, eyes and clothing.

Keep away from ignition sources

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 (ie. sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Dispose of the collected material according to regulations.

- **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**

Avoid contact with skin, eyes and clothing

Keep away from sources of ignition.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Keep receptacles tightly sealed.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

- **Conditions for safe storage, including any incompatibilities**

Store away from strong acids, strong bases, strong oxidizing agents and strong reducing agents.

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Store in a well ventilated place.

Store in a cool, dry place away from sparks and flame.

Do not store in direct sunlight.

Store in a cool location.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

- **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.9A). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

- **Components with occupational exposure limits:**

- **67-64-1 Acetone**

- PEL Long-term value: 2400 mg/m³, 1000 ppm

- REL Long-term value: 590 mg/m³, 250 ppm

- TLV Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm

- Long-term value: (1188) NIC-594 mg/m³, (500) NIC-250 ppm

- BEI

- **Ingredients with biological limit values:**

- **67-64-1 Acetone**

- BEI 50 mg/L

- urine

- end of shift

- Acetone (nonspecific)

- **Additional information:** The lists that were valid during the creation of this SOS were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

- The usual precautionary measures for handling chemicals should be followed.

- Keep away from foodstuffs, beverages and feed.

- Immediately remove all soiled and contaminated clothing and wash before reuse.

- Wash hands before breaks and at the end of work.

- Avoid contact with the eyes.

- Avoid contact with the eyes and skin.

- **Breathing equipment:**



Suitable respiratory protective device recommended.

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:** Not required.

- **Eye protection:**



Tightly sealed goggles or safety glasses with side shields

- **Body protection:** Not required.

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9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Liquid

Color: Colorless

· **Odor:** Mild

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Not determined.

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

· **Flash point:** -18 °C (-0 °F)

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

· **Ignition temperature:** 350 °C (662 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

Lower: 0.9 Vol %

Upper: 13.8 Vol %

· **Vapor pressure @ 25 °C (77 °F):** 116 mm Hg

· **Density @ 20 °C (68 °F):** 0.783 g/cm³ (6.53 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with Water:** Partly soluble.

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

· **Viscosity:**

Dynamic: Not determined.

Kinematic: Not determined.

· **Solvent content:**

VOC content: 0 g/l

· **Other information** No further relevant information available.

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10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal conditions.
- **Thermal decomposition | conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**
Heat, flame and ignition sources.
Elevated temperatures; decomposes with heat. Sources of ignition such as sparks, hot spots, welding, flames.
- **Incompatible materials:**
Strong acids, strong bases, strong oxidizing agents and strong reducing agents.
- **Hazardous decomposition products:** Carbon and Silicon Oxides.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
67-64-1 Acetone
Oral LD50 5800 mg/kg (rat)
Dermal LD50 20000 mg/kg (rabbit)
- **Primary irritant effect:**
- **on the skin:** No irritating effect.
- **on the eye:**
Irritating effect.
Causes serious eye irritation.
- **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)**
Group 1 - Carcinogenic to humans
Group 2A - Probably carcinogenic to humans
Group 2B - Possibly carcinogenic to humans
Group 3 - Not classifiable as to its carcinogenicity to humans
Group 4 - Probably not carcinogenic to humans
None of the ingredients are listed.
- **NTP (National Toxicology Program)**
None of the ingredients are listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients are listed.

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Trade name: EcoSpray ZV-2

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**
67-64-1 Acetone
 EC50 6,100 mg/l (Pimephales) (48 hr)
- **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:** Not known to be hazardous to water.
- **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:**
 ECO SPRAY ZV-2 liquid is to be disposed of according to local, state, and federal regulations. Please call us if you need additional disposal information.
- **Uncleaned packagings:**
- **Recommendation:**
 Disposal must be made according to official regulations.
 Dispose of as unused product.

14 Transport information

- | | |
|-------------------------------------|--|
| · UN-Number | UN1993 |
| · DOT, ADR, IMDG, IATA | UN1993 |
| · UN proper shipping name | Flammable liquids, n.o.s. (Hexamethyldisiloxane, Acetone) |
| · DOT | UN1993 Flammable liquids, n.o.s. (Hexamethyldisiloxane, Acetone) |
| · ADR | UN1993 Flammable liquids, n.o.s. (Hexamethyldisiloxane, Acetone) |
| · IMDG, IATA | FLAMMABLE LIQUID, N.O.S. (Hexamethyldisiloxane, ACETONE) |
| · Transport hazard class(es) | |
| · DOT | |
| · Class | 3 Flammable liquids |
| · Label | 3 |



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Trade name: EcoSpray ZV-2

· **ADR**



· **Class** 3 (F1) Flammable liquids
 · **Label** 3

· **IMDG, IATA**



· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**

· **DOT, ADR, IMDG, IATA** II

· **Environmental hazards:** Not applicable.

· **Special precautions for user** Warning: Flammable liquids

· **Danger code (Kemler):** 33

· **EMS Number:** F-E, S-E

· **Transport in bulk according to Annex II of MARPOL73178 and the IBC Code** Not applicable.

· **Transport1Additional information:**

· **DOT**

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

· **ADR**

· **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **IMDG**

· **Limited quantities (LQ)** 1L
 Code: E2
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1993, Flammable liquids, n.o.s.
 (Hexamethyldisiloxane, Acetone), 3, II

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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 are listed.

- **Section 313 (Specific toxic chemical listings):**
None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act):**
All ingredients are listed.

- **California Proposition 65**

- **Chemicals known to cause cancer:**
None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**
None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**
None of the ingredients are listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**
67-64-1 Acetone /

- **TLV (Threshold Limit Value established by ACGIH)**
67-64-1 Acetone AA

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
None of the ingredients are listed.

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

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger

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Trade name: EcoSpray ZV-2

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

Acetone

· **Hazard statements**

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

· **Precautionary statements**

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.

Use only outdoors or in a well-ventilated area.

Wear protective gloves / eye protection / face protection.

Wear eye protection / face protection.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash thoroughly after handling.

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.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a poison center/doctor if you feel unwell.

If eye irritation persists: Get medical advice/attention.

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

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

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

· **National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

· **State Right to Know**

CAS: 107-46-0 Hexamethyldisiloxane 25-50%

RTECS: JM 9237000 Flam. Liq. 2, H225

CAS: 107-51-7 Octamethyltrisiloxane 25-50%

Flam. Liq. 3, H226

CAS: 67-64-1 Acetone 15-35%

RTECS: AL 3150000 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336

All ingredients are listed.

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Trade name: EcoSpray ZV-2

16 Other information

Ecolink, Inc. believes the information contained herein is accurate. However, Ecolink makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained by the use thereof. Ecolink, Inc. assumes no responsibility for injury from the use of the product described herein.

· **Date of preparation 1 last revision** 05/06/2015

· **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

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

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Flam. Liq. 3: Flammable liquids, Hazard Category 3

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

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

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

SDS created by MSDS Authoring Services www.msdsauthoring.com (877) 20A-9106