

## 1. Identification

|   |  |
|---|--|
| <b>Product identifier</b>                                     | <b>VersaSonic®</b>   |
| <b>Other means of identification</b>                          |  |
| <b>Product code</b>   | VS-02, VS-02-10, VS-04, VS-04-10, VS-25-MV, VS-25-HV, VS-1-MV, VS-1-HV, VS-5-HV-PAIL, VS-5-MV-PAIL, VS-1-F, VS-5-F, VS-15-F, VS-55-F |
| <b>Recommended use</b>  | Ultrasonic Couplant for Industrial NDT Inspection.   |
| <b>Recommended restrictions</b>                               | None known.  |
| <b>Manufacturer/Importer/Supplier/Distributor information</b> |  |
| <b>Company name</b>   | Echo Ultrasonics® LLC  |
| <b>Address</b>  | 774 Marine Drive<br>Bellingham, WA 98225   |
| <b>Telephone</b>  | 360-671-9121   |
| <b>Contact person</b>   | Gene Larson  |
| <b>Emergency telephone</b>                                    | 360-671-9121   |
| <b>Email</b>  | sales@echoultrasonics.com  |

## 2. Hazard(s) identification

|                                 |  |
|---------------------------------|--|
| <b>Physical hazards</b>         | Not classified.  |
| <b>Health hazards</b>           | Not classified.  |
| <b>Environmental hazards</b>    | Not classified.  |
| <b>Label elements</b>           |  |
| <b>Hazard symbol</b>            | None.  |
| <b>Signal word</b>              | None.  |
| <b>Hazard statement</b>         | The mixture does not meet the criteria for classification.                     |
| <b>Precautionary statements</b> |  |
| <b>Prevention</b>               | Observe good industrial hygiene practices.                                     |
| <b>Response</b>                 | Not applicable.  |
| <b>Storage</b>                  | Store away from incompatible materials.  |
| <b>Disposal</b>                 | Dispose of waste and residues in accordance with local authority requirements. |
| <b>Other hazards</b>            | None known.  |
| <b>Supplemental information</b> | None.  |

## 3. Composition/information on ingredients

### Mixtures

| Chemical name             | CAS number | %   |
|---------------------------|------------|-----|
| Oilseed Plant Based Ester | 9083-41-4  | >90 |

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | In case of inhalation of fumes from heated product: Move to fresh air. Call a physician if symptoms develop or persist.           |
| <b>Skin contact</b> | Wash off with soap and water. Get medical attention if irritation develops and persists.  |
| <b>Eye contact</b>  | Hold eyelids apart and flush eyes with plenty of water for 15 minutes. Get medical attention if irritation develops and persists. |
| <b>Ingestion</b>    | Rinse mouth. Get medical attention if symptoms occur.   |

**Most important symptoms/effects, acute and delayed**

Direct contact with eyes may cause temporary irritation. Exposure to hot material may cause thermal burns.

**Indication of immediate medical attention and special treatment needed**

Treat symptomatically.

**5. Fire-fighting measures**

**Suitable extinguishing media**

Water fog. Alcohol-resistant foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire. Caution should be exercised when using water or foam as frothing may occur, especially if directed onto containers of hot or burning material.

**Specific hazards arising from the chemical**

During fire, gases hazardous to health may be formed. Carbon oxides (CO, CO2), smoke and irritating vapors as products of incomplete combustion.

**Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**

Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

Material will burn in a fire.

**6. Accidental release measures**

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

Keep unnecessary personnel away. Be aware of potential for surfaces to become slippery. Avoid contact with eyes. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Caution: Contaminated surfaces may be slippery. Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. DO NOT use combustible materials such as sawdust. Clean contaminated area with oil-removing material. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

No special environmental precautions required.

**7. Handling and storage**

**Precautions for safe handling**

Avoid contact with eyes and prolonged skin contact. When using do not eat or drink. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

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

Store in tightly closed original container in a dry, cool and well-ventilated place. Recommended storage temperature: above -9 °C (15°F). Keep out of the reach of children. Use care in handling/storage. Store away from incompatible materials (see section 10 of the SDS).

**8. Exposure controls/personal protection**

**Occupational exposure limits**

**US. ACGIH Threshold Limit Values**

| Components                                | Type | Value   | Form  |
|---|------|---------|-------|
| Oilseed Plant Based Ester (CAS 9083-41-4) | TWA  | 2 mg/m3 | Fume. |

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

| Components                                | Type | Value   | Form  |
|---|------|---------|-------|
| Oilseed Plant Based Ester (CAS 9083-41-4) | TWA  | 2 mg/m3 | Fume. |

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

| Components                                | Type | Value   | Form  |
|---|------|---------|-------|
| Oilseed Plant Based Ester (CAS 9083-41-4) | TWA  | 2 mg/m3 | Fume. |

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

| Components                                | Type | Value   | Form  |
|---|------|---------|-------|
| Oilseed Plant Based Ester (CAS 9083-41-4) | TWA  | 2 mg/m3 | Fume. |

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

| Components                                   | Type | Value               | Form  |
|--|------|---------------------|-------|
| Oilseed Plant Based Ester<br>(CAS 9083-41-4) | TWA  | 2 mg/m <sup>3</sup> | Fume. |

**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

| Components                                   | Type | Value               | Form  |
|--|------|---------------------|-------|
| Oilseed Plant Based Ester<br>(CAS 9083-41-4) | TWA  | 2 mg/m <sup>3</sup> | Fume. |

|  |   |
|--|---|
| <b>Biological limit values</b>   | No biological exposure limits noted for the ingredient(s).  |
| <b>Exposure guidelines</b>   | Occupational Exposure Limits are not relevant to the current physical form of the product.  |
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
| <b>Individual protection measures, such as personal protective equipment</b> |   |
| <b>Eye/face protection</b>   | Wear safety glasses with side shields (or goggles).   |
| <b>Skin protection</b>   |   |
| <b>Hand protection</b>   | Not normally needed. For prolonged or repeated skin contact use suitable protective gloves.   |
| <b>Other</b>   | Wear suitable protective clothing, when testing at high temperatures.   |
| <b>Respiratory protection</b>  | In case of insufficient ventilation, wear suitable respiratory equipment. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.  |
| <b>Thermal hazards</b>   | Wear appropriate thermal protective clothing, when necessary.   |
| <b>General hygiene considerations</b>  | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.   |

**9. Physical and chemical properties****Appearance**

**Physical state** Solid.

**Form** Grease.

**Colour** Pale yellow.

**Odour** Mild characteristic odor.

**Odour threshold** Not available.

**pH** Not available.

**Melting point/freezing point** -26 °C (-14.8 °F)

**Initial boiling point and boiling range** > 310 °C (> 590 °F)

**Flash point** 226.7 °C (440.0 °F)

**Evaporation rate** < 1 % at 100 °C

**Flammability (solid, gas)** Non-flammable by WHMIS/OSHA/NOM-018-STPS 2000 criteria.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapour pressure** < 0.001 torr

**Vapor pressure temp.** 25 °C (77 °F)

**Vapour density** > 1 (Air= 1)

**Relative density** ~0.95 (H<sub>2</sub>O=1)

|  |  |
|--|--|
| <b>Solubility(ies)</b>                         |  |
| <b>Solubility (water)</b>                      | Insoluble in water.  |
| <b>Partition coefficient (n-octanol/water)</b> | Not available.   |
| <b>Auto-ignition temperature</b>               | 420 °C (788 °F) (Laboratory test)  |
| <b>Decomposition temperature</b>               | Not available.   |
| <b>Viscosity</b>                               | 29.25 Pa·s at a shear rate 2.25 seconds (TA Rheometer)<br>80.54 Pa·s at a shear rate 2.9 seconds (TA Rheometer)<br>750 cSt Fluid |
| <b>Other information</b>                       |  |
| <b>Explosive properties</b>                    | Not explosive.   |
| <b>Oxidising properties</b>                    | Not oxidising.   |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials. Can react vigorously with oxidizing materials.           |
| <b>Incompatible materials</b>             | Strong oxidising agents. Acids.   |
| <b>Hazardous decomposition products</b>   | Fumes, smoke, carbon monoxide and other products of incomplete combustion.                    |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | No adverse effects due to inhalation are expected.       |
| <b>Skin contact</b> | No adverse effects due to skin contact are expected.     |
| <b>Eye contact</b>  | Direct contact with eyes may cause temporary irritation. |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.                   |

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation. Hot material will produce thermal burns.

### Information on toxicological effects

|   |  |
|---|--|
| <b>Acute toxicity</b>                     | Not expected to be acutely toxic.  |
| <b>Skin corrosion/irritation</b>          | No adverse effects due to skin contact.  |
| <b>Corrosivity</b>                        |  |
| Oilseed Plant Based Ester (CAS 9083-41-4) | Method: Patch Test<br>Result: Not irritating<br>Species: Human<br>Organ: Skin<br>Test Duration: 48 hours |

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

### Respiratory or skin sensitisation

|                                  |   |
|----------------------------------|---|
| <b>Respiratory sensitisation</b> | Not a respiratory sensitiser.                             |
| <b>Skin sensitisation</b>        | This product is not expected to cause skin sensitisation. |

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Due to the physical form of the product it is not an aspiration hazard.

**Chronic effects** Chronic effects are not expected when this product is used as intended.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous.

**Persistence and degradability** Biodegradable.

**Bioaccumulative potential** The product is not expected to bioaccumulate.

**Mobility in soil** The product is insoluble in water and has a low mobility in the environment.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Dispose in accordance with all applicable regulations.

**Local disposal regulations** Dispose of in accordance with local regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### TDG

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

### Controlled Drugs and Substances Act

Not regulated.

### Export Control List (CEPA 1999, Schedule 3)

Not listed.

### Greenhouse Gases

Not listed.

### Precursor Control Regulations

Not regulated.

### International regulations

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Kyoto protocol

Not applicable.

#### Montreal Protocol

Not applicable.

#### Basel Convention

Not applicable.

## International Inventories

| Country(s) or region        | Inventory name                                | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes                    |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information

**Issue date** 21-June-2017

**Revision date** -

**Version No.** 01

**List of abbreviations** IARC: International Agency for Research on Cancer.  
NTP: National Toxicology Program.  
OSHA: Occupational Safety & Health Administration.  
ACGIH: American Conference of Governmental Industrial Hygienists.

**References** In-house data

**Disclaimer** Echo Ultrasonics® LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.