



SAFETY DATA SHEET

1. Identification

Product identifier	VersaSonic®
Other means of identification	
Product code	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
Recommended use of the chemical and restrictions on use	
Recommended use	Ultrasonic Couplant for Industrial NDT Inspection.
Restrictions on use	Not available.
Details of manufacturer or importer	
Manufacturer	Echo Ultrasonics® LLC 774 Marine Drive Bellingham, WA 98225
Telephone	360-671-9121
Contact person	Gene Larson
Emergency telephone	360-671-9121
Email	sales@echoultrasonics.com
Importer	Caterpillar of Australia Pty Ltd.
Address	1 Caterpillar Drive Tullamarine, Victoria,, Australia 3043
Telephone	+61 3 9953 9333
Emergency telephone	+813-248-0585

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.

Label elements, including precautionary statements

Hazard symbol(s)	None.
Signal word	None.
Hazard statement(s)	The mixture does not meet the criteria for classification.
Precautionary statement(s)	
Prevention	Observe good industrial hygiene practices.
Response	Not applicable.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Other hazards which do not result in classification None known.

Supplemental information None.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
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

Description of necessary first aid measures

Inhalation	In case of inhalation of fumes from heated product: Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Hold eyelids apart and flush eyes with plenty of water for 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Symptoms caused by exposure	Direct contact with eyes may cause temporary irritation. Exposure to hot material may cause thermal burns.
Medical attention and special treatment	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

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 fire fighters 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.

Hazchem Code None.

General fire hazards Material will burn in a fire.

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

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel 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.

For emergency responders Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

Environmental precautions No special environmental precautions required.

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.

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 and personal protection

Control parameters Follow standard monitoring procedures.

Occupational exposure limits

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

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

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

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

US. ACGIH Threshold Limit Values

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

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Oilseed Plant Based Ester (CAS 9083-41-4)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

Control banding approach

No data available.

Appropriate engineering controls

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.

Individual protection measures, for example personal protective equipment (PPE)

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Not normally needed. For prolonged or repeated skin contact use suitable protective gloves.

Other

Wear suitable protective clothing, when testing at high temperatures.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

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 (H2O=1)
Solubility(ies)	
Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	420 °C (788 °F) (Laboratory test)
Decomposition temperature	Not available.
Viscosity	29.25 Pa·s at a shear rate 2.25 seconds (TA Rheometer) 80.54 Pa·s at a shear rate 2.9 seconds (TA Rheometer) 750 cSt Fluid
Other physical and chemical parameters	
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

10. Stability and reactivity

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

11. Toxicological information

Information on possible routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to exposure	Direct contact with eyes may cause temporary irritation. Hot material will produce thermal burns.
Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	No adverse effects due to skin contact.

Corrosivity

Oilseed Plant Based Ester (CAS 9083-41-4)

Method: Patch Test
Result: Not irritating
Species: Human
Organ: Skin
Test Duration: 48 hours

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

Respiratory or skin sensitisation

Respiratory sensitisation	Not a respiratory sensitiser.
Skin sensitisation	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 methods	Dispose in accordance with all applicable regulations.
Residual waste	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

ADG

Not regulated as dangerous goods.

RID

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

Safety, health and environmental regulations

National regulations No poison schedule number allocated. This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals (23/12/2011).

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 10

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)

Oilseed Plant Based Ester (CAS 9083-41-4)

1000 - 9999 TONNES See the regulation for additional information.

Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

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 -

Key abbreviations or acronyms used

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.