Material Safety Data Sheet

Product Name CVT MULTISYN

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name TRU-BLU OIL AUSTRALIA PTY LTD
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Synonym(s)

Use(s) Continuously Variable Transmission Fluid
SDS Date 30 August 2013

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Hazards:

- Harmful if inhaled
- May cause eye irritation
- May cause skin irritation
- May cause respiratory tract irritation

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Hazardous components

Comp	Percentage (by wt.)	Symbol(s)	Risk Phrase(s)	CAS No.
Alkyl acetamide	From 1 to 4.9 percent	Xi	R38 R43	Confidential.
Alkyl borate	From 1 to 4.9 percent	Xi	R36/38	Confidential.
Dibutylhydrogen phosphite	From 0.5 to 1.5 percent	Xi	R36/38	1809-19-4
Diphenylamine	From 0.1 to 0.9 percent	T	R23/24/25 R33	122-39-4

4. FIRST AID MEASURES

Eye If in eyes, hold eyelids apart and flush continuously with running water. Remove contact lenses , if present and easy to do so. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Skin If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with soap and water. Get medical attention if irritation develops.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. Call a poison centre or doctor if exposed or you feel unwell.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

Advice to Doctor Treat symptomatically.

First Aid Facilities Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES

Flammability Combustible. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition

Fire and Explosion Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

Extinguishing Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways.

Hazchem Code None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spillage Use personal protective equipment. Clear area of all unprotected personnel. Ventilate area where possible. Contain spillage, then cover / absorb spill with non-combustible absorbant material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

7. STORAGE AND HANDLING

Storage Store in a cool, dry, well-ventilated area, removed from oxidising agents, acids, alkalis, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate fire protection systems. Store as a Class C2 Combustible Liquid (AS1940).

Handling Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Avoid breathing dust, fume, gas, mist, vapours or spray. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Standards

Ingredient	Reference	TWA		STEL	
Mineral oil mist	SWA (AUS)	--	5 mg/m3	--	--
Diphenylamine	8 hours TWA (ACGIH)	--	10 mg/m3	--	--

Biological Limits No biological limit allocated.

Engineering Controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE Wear splash-proof goggles and nitrile or neoprene gloves. When using large quantities or where heavy contamination is likely, wear: coveralls. Where an inhalation risk exists, wear: a Type A (Organic vapour) respirator. Use self-contained breathing apparatus for entry into a confined space.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Red Coloured Liquid	Solubility (Water)	Insoluble
Odour	Strong Characteristic Odour	Specific Gravity	0.854

pH	Not Relevant	% Volatiles	Not Available
Vapour Pressure	Not Available	Flammability	Class C2 Combustible
Vapour Density	Not Available	Flash Point	>170°C
Boiling Point	Not Available	Upper Explosion Limit	Not Available
Melting Point	Not Available	Lower Explosion Limit	Not Available
Viscosity	7.72 cSt @100°C		

10. STABILITY AND REACTIVITY

Chemical Stability Stable under recommended conditions of storage.

Conditions to Avoid Avoid heat, sparks, open flames and other ignition sources.

Material to Avoid Incompatible with oxidising agents (eg. Hypochlorites), acids (eg. nitric acid), alkalis (eg. hydroxides), heat and ignition sources.

Hazardous Decomposition Products May evolve toxic gases (carbon oxides, hydrocarbons, aldehydes, oxides of nitrogen) when heated to decomposition.

Hazardous Reactions Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

– ACUTE EXPOSURE –

Oral Toxicity	The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials. Ingestion may cause CNS depression.
Eye Irritation	Weak to moderate eye irritant. Does not meet Canadian D2B or EU R36 criteria. Based on data from components or similar materials. Vapors may cause irritation and lacrimation, especially when heated.
Skin Irritation	May cause slight skin irritation. Does not meet EU R38 criteria. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
Dermal Toxicity	The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.
Inhalation Toxicity	The LC50 (4 hr.) in rats for dust or mist of this material is > 50 mg/l. Based on data from components or similar materials. Inhalation of this material may produce symptoms similar to those for ingestion. Inhalation of this material may be harmful.
Respiratory Irritation	May cause nose, throat, and lung irritation. Based on data from components or similar materials.
Dermal Sensitization	No data available to indicate product or components may be a skin sensitizer.
Inhalation Sensitization	No data available to indicate product or components may be respiratory sensitizers.

– CHRONIC EXPOSURE –

Chronic Toxicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Carcinogenicity	This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extrables by the IP 346 test.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive Toxicity	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
Teratogenicity	There are conflicting reports in the literature concerning the teratogenicity of diphenylamine. However, because the predominant route of exposure was oral (via gavage or diet) and relatively high dose levels were administered in the studies where positive effects were observed, it would not seem to present a workplace hazard.

– ADDITIONAL INFORMATION –

Other	No other health hazards known.

12. ECOLOGICAL INFORMATION

Freshwater Fish Toxicity	The acute LC50 is 10 - 100 mg/L based on component data.
Freshwater Invertebrates Toxicity	The acute EC50 is 10 - 100 mg/L based on component data.
Algal Inhibition	The acute EC50 is 10 - 100 mg/L based on component data. The Ethoxylated amine contained in this product has an EC50 between 0.01 and 0.1 mg/L.
Saltwater Fish Toxicity	Not determined.
Saltwater Invertebrates Toxicity	Not determined.
Bacteria Toxicity	Not determined.
Miscellaneous Toxicity	Not determined.

– ENVIRONMENTAL FATE –

Biodegradation	At least 25% of the components in this product show moderate biodegradation based on OECD 302-type test data.
Bioaccumulation	10 - 25% of the components potentially bioconcentrate, based on measured octanol/water partition coefficients.
Soil Mobility	Not determined.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Reuse where possible or return to the manufacturer. May be recycled. Do not release to drains or waterways. Contact the manufacturer for additional information

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name	None Allocated	**Packing Group**	None Allocated	**Hazchem Code**	None Allocated
UN No.	None Allocated	**DG Class**	None Allocated	**Subsidiary Risks(s)**	None Allocated

15. REGULATORY INFORMATION

Poison Schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

AICS A component of this product has been notified and assessed under the Industrial Chemicals (Notification and Assessment) Act, 1989.

16. OTHER INFORMATION

Additional Information

MINERAL OILS - SOLVENT REFINED; Animal experiments and human experience have not shown cancer risks when handling solvent refined mineral oils, unlike non refined mineral oils. CLEANING MINERAL OIL CONTAMINATED CLOTHING; Cleaners are advised that when cleaning oil contaminated clothing it is essential that freshly distilled solvent is used for each batch, including final rinse, as even filtered solvent will leave oil residues.

MINERAL OILS - USED; Used mineral oils in engine crankcases and other high temperature/high stress environments may contain potentially harmful residues, some of which have been shown to cause irreversible skin effects, including cancer. Prolonged and repeated inhalation of mists associated with used mineral oils may result in pulmonary fibrosis.

MINERAL OILS - INJECTION; Where high pressure applications are used the risk of accidental injection under the skin exists and may result in an extremely painful and serious injury requiring immediate medical attention. Depending on the pressure used, mineral oils may be injected a considerable distance below the skin and may cause permanent tissue damage. SEEK IMMEDIATE MEDICAL ATTENTION. EXERCISE EXTREME CARE WHEN USING HIGH PRESSURE EQUIPMENT.

ABBREVIATIONS: ADB - Air-Dry Basis.
BEI - Biological Exposure Indice(s)
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
CNS - Central Nervous System.
EC No - European Community Number.

IARC - International Agency for Research on Cancer.
M - moles per litre, a unit of concentration.
mg/m3 - Milligrams per cubic metre.
NOS - Not Otherwise Specified.
NTP - National Toxicology Program.
OSHA - Occupational Safety and Health Administration.
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm - Parts Per Million.
RTECS - Registry of Toxic Effects of Chemical Substances.
TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a MSDS which would encompass all possible scenarios, it is anticipated that the end user will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this MSDS is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered by the end user before final selection of personal protective equipment is made.

REPORT STATUS:

This MSDS has been prepared by Tru-Blu Oil using the most current information available at the time of issuing. Tru-Blu Oil accepts no liability (as lawfully allowed) for any loss, injury or damage which may have been suffered or incurred by any person as a consequence of their reliance on information that is contained in this MSDS.

MSDS Date: 30 August 2013

End of MSDS