



SAFETY DATA SHEET

Synthetic Manual Transmission & Transaxle Gear Lubricant

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200 and WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR).

1. Identification		
Product identifier		
Product name	Synthetic Manual Transmission & Transaxle Gear Lubricant	
Product number	MTG	
Recommended use of the chemical and restrictions on use		
Application	Lubricating oil.	
Uses advised against	Avoid the formation of mists.	
Details of the supplier of the s	afety data sheet	
Supplier	AMSOIL INC. Bordner, Ladner, Gervais Scotia Plaza, 40 King St W Toronto, ON, Canada M5H 3Y4 T: +1 416-367-6547	
Manufacturer	AMSOIL INC. One AMSOIL Center, Superior, WI 54880, USA. T: +1 715-392-7101 compliance@amsoil.com	
Emergency telephone number	<u>r</u>	
Emergency telephone	CHEMTREC: Within USA and Canada: 1-800-424-9300 Outside the USA and Canada: +1 703-741-5970 (collect calls accepted) 24/7	
2. Hazard(s) identification		
Classification of the substance	e or mixture	
OSHA/WHMIS Regulatory Status	This Product is not Hazardous under the OSHA Hazard Communication Standard and according to the hazard criteria of the Hazardous Product Regulations.	
Physical hazards	Not Classified	
Health hazards	Not Classified	
Environmental hazards	Aquatic Acute 3 - H402 Aquatic Chronic 3 - H412	
Label elements		
Hazard statements	H412 Harmful to aquatic life with long lasting effects.	
Precautionary statements	P273 Avoid release to the environment. P501 Dispose of contents/ container in accordance with national regulations.	
Other hazards		

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

3. Composition/information on i	ngredients
Mixtures	
Dec-1-ene, homopolymer, hyd oligomers, hydrogenated	rogenated Dec-1-ene, 25 - <50%
CAS number: 68037-01-4	
Classification	
Asp. Tox. 1 - H304	
(Z)-Octadec-9-enylamine	0.025 - <0.25%
CAS number: 112-90-3	
M factor (Acute) = 10	M factor (Chronic) = 10
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318 STOT SE 3 - H335	
STOT RE 2 - H373	
Asp. Tox. 1 - H304	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
p-Dodecylphenol	0.025 - <0.25%
CAS number: 104-43-8	
M factor (Acute) = 10	M factor (Chronic) = 1
Classification	
Skin Corr. 1C - H314	
Eye Dam. 1 - H318	
Repr. 1B - H360	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	
Ethanediol	<0.025%
CAS number: 107-21-1	
Classification	
Acute Tox. 4 - H302	
STOT RE 2 - H373	
The full text for all hazard stater	ments is displayed in Section 16.
Composition comments	The exact percentage is withheld as a trade secret in accordance with 29 CFR 1910.1200.
4. First-aid measures	
Description of first aid measure	S
	-

General information

Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Ingestion	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin Contact	Rinse with water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.
Most important symptoms and	effects, both acute and delayed
General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.
Indication of immediate medic	al attention and special treatment needed
Notes for the doctor	Treat symptomatically.
Specific treatments	No special treatment required.
5. Fire-fighting measures	
Extinguishing media	
Extinguishing media Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire- extinguishing media suitable for the surrounding fire.
Suitable extinguishing media	extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire.
Suitable extinguishing media Unsuitable extinguishing media	extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire.
Suitable extinguishing media Unsuitable extinguishing media Special hazards arising from t	extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire. he substance or mixture Containers can burst violently or explode when heated, due to excessive pressure build-up. Contains Hydrocarbons. The product is immiscible with water and will spread on the water
Suitable extinguishing media Unsuitable extinguishing media <u>Special hazards arising from t</u> Specific hazards Hazardous combustion	extinguishing media suitable for the surrounding fire. Do not use water jet as an extinguisher, as this will spread the fire. he substance or mixture Containers can burst violently or explode when heated, due to excessive pressure build-up. Contains Hydrocarbons. The product is immiscible with water and will spread on the water surface. Thermal decomposition or combustion products may include the following substances:

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves, that provides a basic level of protection during chemical incidents is defined by the Canada Occupational Health and Safety Regulations, by provincial guidelines on occupational health and safety or by NFPA standards if applicable.	
6. Accidental release measure	\$	
Personal precautions, protectiv	ve equipment and emergency procedures	
Personal precautions	No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Use protective equipment appropriate for surrounding materials.	
Environmental precautions		
Environmental precautions	Harmful to aquatic life with long lasting effects. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).	
Methods and material for containment and cleaning up		
Methods for cleaning up	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.	
Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.	
7. Handling and storage		
Precautions for safe handling		
Usage precautions	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Avoid contact with used product. Do not reuse empty containers.	
Advice on general occupational hygiene	Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.	
Conditions for safe storage, in	cluding any incompatibilities	
Storage precautions	Store away from incompatible materials (see Section 10). Keep container tightly closed, in a cool, well ventilated place. Protect containers from damage.	
Storage class	Chemical storage.	
Specific end uses(s)		
Specific end use(s)	The identified uses for this product are detailed in Section 1.	
8. Exposure Controls/personal	protection	
Control parameters		

Occupational exposure limits

Comments

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Under conditions which may generate mists, the following exposure limits are recommended: Long-term exposure limit (8-hour TWA): 5 mg/m³ Short-term exposure limit (15-minute): 10 mg/m³

Ethanediol

Ceiling exposure limit: ACGIH 100 mg/m³ Aerosol

A4

ACGIH = American Conference of Governmental Industrial Hygienists. A4 = Not Classifiable as a Human Carcinogen.

Exposure controls

Appropriate engineering controls	Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133 and/or the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.6), and any relevant provincial regulation relating to health and safety at work. The following protection should be worn: Chemical splash goggles.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and/or the Canadian regulation on health and safety at work, SOR/86-304, Part XII (12.9), and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Keep container tightly sealed when not in use.
9. Physical and Chemical Pr	operties

Information on basic physical and chemical properties Appearance Liquid. Color Xellow

Color	Yellow.
Odor	Mild hydrocarbon.
Odor threshold	Not available.

рН	Not available.
Melting point	Not available.
Initial boiling point and range	Not available.
Flash point	214°C Cleveland open cup. [ASTM D 92]
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.8468
Solubility(ies)	Not known.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	87.6 cSt @ 40°C 13.9 cSt @ 100°C [ASTM D 445]
Explosive properties	Not considered to be explosive.
Oxidizing properties	Does not meet the criteria for classification as oxidizing.
Fire point	236°C Cleveland open cup. [ASTM D 92]
Pour point	-54°C [ASTM D 97]
10. Stability and reactivity	
Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.
11. Toxicological information	
Information on toxicological et	fects
Toxicological effects	Not regarded as a health hazard under current legislation.
Acute toxicity - oral	

Acute toxicity - oral

Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	54,421.77
<u>Acute toxicity - dermal</u> Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	163,265.31
Acute toxicity - inhalation	
Notes (inhalation LC ₅₀)	Based on available data the classification criteria are not met.
ATE inhalation (vapours mg/l)	1,632.65
Skin corrosion/irritation Animal data	Based on available data the classification criteria are not met.
Serious eye damage/irritation Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitization Respiratory sensitization	Based on available data the classification criteria are not met.
Skin sensitization Skin sensitization	Based on available data the classification criteria are not met.
Germ cell mutagenicity Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.
Specific target organ toxicity -	single exposure
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
Specific target organ toxicity -	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard Aspiration hazard	Based on available data the classification criteria are not met.
General information	No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin Contact	Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.

Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.

Toxicological information on ingredients.

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated

Acute toxicity - oral	
Notes (oral LD₅₀)	LD₅₀ >5000 mg/kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.
Acute toxicity - dermal	
Notes (dermal LD₅₀)	LD₅₀ >2000 mg/kg, Dermal, Rat REACH dossier information. Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Notes (inhalation LC₅₀)	LC_{50} >5.2 mg/l, Inhalation, Rat REACH dossier information. Based on available dat the classification criteria are not met.
Skin corrosion/irritation	
Animal data	Dose: 0.5 mL, 24 hours, Rabbit Erythema/eschar score: No erythema (0). Edema score: No oedema (0). Primary dermal irritation index: 0.5 REACH dossier information. Based on available data the classification criteria are not met.
Serious eye damage/irritati	ion
Serious eye damage/irritation	Dose: 0.1 mL, 72 hours, Rabbit Not irritating. REACH dossier information. Based o available data the classification criteria are not met.
Skin sensitization	
Skin sensitization	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitizing. REACH dossie information. Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information. Based on availabl data the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity - fertility	One-generation study - NOAEL 1000 mg/kg/day, Oral, Rat P REACH dossier information. Based on available data the classification criteria are not met.
Aspiration hazard	
Aspiration hazard	Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
	may cause chemical pheumonius.

Toxicity

Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated

Toxicity	Based on available data the classification criteria are not met. Aquatic toxicity is	
	unlikely to occur.	
Acute aquatic toxicity		
Acute toxicity - fish	LL₅₀, 96 hours: >1000 mg/l, Oncorhynchus mykiss (Rainbow trout)	
Acute toxicity - aquatic invertebrates	EL₅₀, 48 hours: >1000 mg/l, Daphnia magna	
Acute toxicity - aquatic plants	EL ₅₀ , 72 hours: >1000 mg/l, Selenastrum capricornutum	
Acute toxicity - microorganisms	NOEC, 28 days: 2 mg/l, Activated sludge	
Chronic aquatic toxicity		
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 125 mg/l, Daphnia magna	
Persistence and degradability		
Persistence and degradability The deg	radability of the product is not known.	
Ecological information on ingredients.		
Dec-1-en	e, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	
Persistence and degradability	Not readily biodegradable.	
Biodegradation	Water - Degradation 2%: 28 days	
Bioaccumulative potential		
Bio-Accumulative Potential No data	available on bioaccumulation.	
Partition coefficient Not available	ilable.	
Ecological information on ingredients.		
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated		
Partition coefficient	log Pow: >6.5	
Mobility in soil		
	available.	
Ecological information on ingredients.		
Dec-1-en	e, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	
	The product is insoluble in water	
Mobility	The product is insoluble in water.	
Surface tension	27-29 mN/m @ 20°C	
Other adverse effects		
Other adverse effects None kn	iown.	

13. Disposal considerations

Waste treatment methods

General information	The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.
Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.
14. Transport information	

General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT, TDG).

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

Transport labels

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance No.

Special precautions for user

Not applicable.

DOT TIH Zone Not applicable.

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

15. Regulatory information	
Regulatory References	OSHA Hazard Communication Standard 29 CFR §1910.1200 Hazardous Products Regulation
Rogulatory References	(SOR/2015-17) Transportation of Dangerous Goods Regulations -SOR/2015-100.

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities None of the ingredients are listed or exempt.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed or exempt:

Ethanediol

Final CERCLA RQ: 5000(2270) pounds (Kilograms)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated

1.0 %

Ethanediol 1.0 %

CAA Accidental Release Prevention

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed or exempt.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins The following ingredients are listed or exempt:

Ethanediol Known to the State of California to cause developmental and reproductive toxicity.

California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed or exempt:

Ethanediol

California Air Toxics "Hot Spots" (A-II) None of the ingredients are listed or exempt.

None of the ingredients are listed of exempt.

California Directors List of Hazardous Substances

The following ingredients are listed or exempt:

Ethanediol

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Ethanediol

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Ethanediol

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Ethanediol

New Jersey "Right To Know" List The following ingredients are listed or exempt:

Bis(2-ethylhexyl) hydrogen phosphate

Ethanediol

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Ethanediol

Inventories

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms used in the safety data sheet	C.A.S. = Chemical Abstracts Service; E.C. No = European Commission number; GHS = Globally Harmonised System; OSHA = Occupational Safety and Health Administration; WHMIS = Workplace Hazardous Materials Information System; DOT = Department of Transport; TDG = Transport of Dangerous Goods Regulations; IMDG = International Maritime Dangerous Goods; IATA = International Air Transport Association; SARA = Superfund Amendments and Reauthorization Act; CERCLA = Comprehensive Environmental; EPCRA = Emergency Planning and Community Right-to-Know Act; TSCA = Toxic Substances Control Act; LD/LC/EC = Lethal Dose,Lethal Concentration/Effect Concentration for 50% of population; NOEC = No Overall Effect Concentration; NOEL = No Overall Effect Level; REACH = Registration, Evaluation, Authorisation & Restriction of Chemicals; STOT-RE = Single Target Organ Toxicity - Repeat Exposure; STOT-SE= Specific Target Organ Toxicity - Single Exposure; PBT = Persistent, Bioaccumulative, Toxic; vPvB = Very Persistent, Very Bioaccumulative.
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Revision comments	This is the first issue.
Revision date	4/12/2018
SDS No.	7394

Hazard statements in full	 H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H335 May cause respiratory irritation. H360 May damage fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H373 May cause damage to organs (Gastro-intestinal tract, liver, immune system) through
	prolonged or repeated exposure. H400 Very toxic to aquatic life. H402 Harmful to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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