



## SAFETY DATA SHEET

Formula 4-Stroke® Power Sports SAE 0W-40 Synthetic Motor Oil

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	Formula 4-Stroke® Power Sports SAE 0W-40 Synthetic Motor Oil	
Product number	AFF	
Recommended use of the chemical and restrictions on use		
Application	Engine 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 numbe	<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 substanc	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	Not Classified	
Label elements Hazard statements	NC Not Classified	
Other hazards		
This product does not contain any substances classified as PBT or vPvB.		
3. Composition/information on ingredients		

Mixtures

Hydrogenated base oil	10 - <15%		
CAS number: 64742-54-7	CAS number: 64742-54-7		
Classification Asp. Tox. 1 - H304			
Dec-1-ene, homopolymer, holigomers, hydrogenated	nydrogenated Dec-1-ene, 10 - <25%		
CAS number: 68037-01-4			
Classification Asp. Tox. 1 - H304			
Benzenamine, N-phenyl-, re trimethylpentene	eaction products with 2,4,4- 1 - <2.5%		
CAS number: 68411-46-1			
<b>Classification</b> Aquatic Chronic 3 - H412			
The full text for all hazard sta	atements 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 measu	ires		
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. Remove any dentures. 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 ar	nd 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			
Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire- extinguishing media suitable for the surrounding fire.		
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.		
Special hazards arising from t	he substance or mixture		
Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.		
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.		
Advice for firefighters			
Protective actions during firefighting	Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak.		
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	IS		
Personal precautions, protecti	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	Avoid discharge to the aquatic environment.		
Methods and material for cont	ainment 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 contact with used product. Do not reuse empty containers. Avoid the formation of mists.	
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, including 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	I 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 g	enerate mists, the following exposure limits are recommended:	
Long-term exposure limit (8-ho		
Short-term exposure limit (15-	minute): 10 mg/m <sup>3</sup>	
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 bodyAppropriate footwear and additional protective clothing complying with an approved standard<br/>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	Not regarded as dangerous for the environment.

9. Physical and Chemical Properties

### Information on basic physical and chemical properties

arance Liquid.
Amber.
Mild hydrocarbon.
threshold Not available.
Not available.
ng point Not available.
boiling point and range Not available.
point 234°C Cleveland open cup. [ASTM D 92]
oration rate Not available.
er/lower flammability or Not available. Dive limits
or pressure Not available.
or density Not available.
tive density 0.8488
bility(ies) Not known.
tion coefficient Not available.
ignition temperature Not available.
mposition Temperature Not available.
bity 87.0 cSt @ 40°C   14.8 cSt @ 100°C   [ASTM D 445]
<b>Disive properties</b> Not considered to be explosive.
<b>zing properties</b> Does not meet the criteria for classification as oxidizing.
point 246°C Cleveland open cup. [ASTM D 92]
point -50°C [ASTM D 97]
tability and reactivity

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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 ef	fects
Toxicological effects	Not regarded as a health hazard under current legislation.
Acute toxicity - oral Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
Acute toxicity - dermal Notes (dermal LD <sub>50</sub> )	Based on available data the classification criteria are not met.
Acute toxicity - inhalation Notes (inhalation LC <sub>50</sub> )	Based on available data the classification criteria are not met.
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.

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

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.

### Specific target organ toxicity - repeated exposure

Toxicological information on ingredients.

### Hydrogenated base oil

Acute toxicity - oral			
Notes (oral LD₅₀)	LD₅₀ >5000 mg/kg, Oral, Rat REACH dossier information.		
Acute toxicity - dermal			
Notes (dermal LD₅₀)	LD₅₀ >5000 mg/kg, Dermal, Rabbit REACH dossier information.		
Acute toxicity - inhalation			
Notes (inhalation LC <sub>50</sub> )	LC₅₀ >5.53 mg/l, Inhalation, Rat REACH dossier information.		
Skin corrosion/irritation			
Animal data	Dose: 0.5ml, 24 hours, Rabbit Erythema/eschar score: No erythema (0). Edema score: No oedema (0). REACH dossier information.		
Serious eye damage/irritat	Serious eye damage/irritation		
Serious eye damage/irritation	Dose: 0.1ml, 72 hours, Rabbit REACH dossier information.		
Skin sensitization			
Skin sensitization	Buehler test - Guinea pig: Not sensitizing. REACH dossier information.		
Germ cell mutagenicity			
Genotoxicity - in vitro	Gene mutation: Negative. REACH dossier information.		
Genotoxicity - in vivo	Chromosome aberration: Negative. REACH dossier information.		
Reproductive toxicity			
Reproductive toxicity - fertility	Screening - NOAEL > 1000 mg/kg/day, Oral, Rat P REACH dossier information.		
Reproductive toxicity - development	Developmental toxicity: - LOAEL: 125 mg/kg/day, Dermal, Rat REACH dossier information.		

# Formula 4-Stroke® Power Sports SAE 0W-40 Synthetic Motor Oil

	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 $LC_{50}$ )	$LC_{50}$ >5.2 mg/l, Inhalation, Rat REACH dossier information. Based on available data 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/irrita	tion	
	Serious eye damage/irritation	Dose: 0.1 mL, 72 hours, Rabbit Not irritating. REACH dossier information. Based on available data the classification criteria are not met.	
	Skin sensitization		
	Skin sensitization	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitizing. REACH dossier 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 available 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.	
12. Ecologic	cal Information		
Ecotoxicity	=	arded as dangerous for the environment. However, large or frequent spills may have ous effects on the environment.	
Toxicity	Based	on available data the classification criteria are not met.	
Ecological in	nformation on ingredients.		
		Hydrogenated base oil	
	Acute aquatic toxicity		
	Acute toxicity - fish	LL₅₀, 96 hours: > 100 mg/l, Pimephales promelas (Fat-head Minnow)	

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Acute toxicity - aquatic invertebrates	EL₅₀, 48 hours: > 10000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOEL, 72 hours: > 100 mg/l, Pseudokirchneriella subcapitata

#### 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	LL <sub>50</sub> , 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	EL₅₀, 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	Persistence and degradability	
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Persistence and degradability The degradability of the product is not known.

#### Ecological information on ingredients.

#### Hydrogenated base oil

Biodegradation	Water - Degradation 31: 28 days Inherently biodegradable.	
	Dec-1-ene, 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.	
Ecological information on ingredients.		
	Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	
Partition coefficient log Pow: >6.5		
Mobility in soil Mobility	No data available.	

## Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated Mobility The product is insoluble in water. Surface tension 27-29 mN/m @ 20°C Other adverse effects Other adverse effects None known. 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
	(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)

None of the ingredients are listed or exempt.

### 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:

Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 1.0 %

Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated 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 None of the ingredients are listed or exempt.

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

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

California Directors List of Hazardous Substances None of the ingredients are listed or exempt.

#### Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Hydrogenated base oil

Rhode Island "Right To Know" List None of the ingredients are listed or exempt.

Minnesota "Right To Know" List None of the ingredients are listed or exempt.

New Jersey "Right To Know" List None of the ingredients are listed or exempt.

#### Pennsylvania "Right To Know" List

None of the ingredients are listed or exempt.

#### 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	4/11/2018
SDS No.	7386
Hazard statements in full	H304 May be fatal if swallowed and enters airways. 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.