Shell Canada Limited
Material Safety Data Sheet

Effective Date: 2010-03-15
Supersedes: 2005-05-11

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT:	**MOTOMASTER FORMULA 1 HI-MILEAGE 5W-30**
SYNONYMS:	Gasoline Engine Oil
PRODUCT USE:	Engine Crankcase Lubricating Oil
PRODUCT CODE:	**460-340**

SUPPLIER	**TELEPHONE NUMBERS**	
Shell Canada Limited (SCL)	**Shell Emergency Number**	1-800-661-7378
P.O. Box 100, Station M	**CANUTEC 24 HOUR EMERGENCY NUMBER**	1-613-996-6666
400-4th Ave. S.W.	For general information:	1-800-661-1600
Calgary, AB Canada		www.shell.ca
T2P 2H5		

This MSDS was prepared by the Toxicology and Product Stewardship Section of Shell Canada Limited.
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2. COMPOSITION / INFORMATION ON INGREDIENTS

THIS PRODUCT IS NOT A WHMIS CONTROLLED SUBSTANCE.
See Section 8 for Occupational Exposure Guidelines.

3. HAZARDS IDENTIFICATION

Physical Description: Liquid Amber colour Hydrocarbon Odour

Routes of Exposure: Exposure will most likely occur through skin contact or from inhalation of mechanically or thermally generated oil mists.

Hazards:

This product is not expected to be irritating and has a low level of toxicity under normal use.
Inhalation of oil mist or vapours from hot oil may cause irritation of the upper respiratory tract.

For further information on health effects, see Section 11.

4. FIRST AID MEASURES

Eyes: Flush eyes with water for at least 15 minutes while holding eyelids open. If irritation occurs and persists, obtain medical attention.

Skin: Wipe excess from skin. Wash contaminated skin with mild soap and water for at least 15 minutes. If irritation occurs and persists, obtain medical attention. If material is injected under the skin, get medical attention promptly to prevent serious damage; do not wait for symptoms to develop.

Ingestion: Not normally required; obtain medical attention if large amounts have been ingested. Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Inhalation: Remove victim from further exposure. Additional first aid treatment is not ordinarily required.

Notes to Physician: In general, lubricating oils have low oral toxicity. High pressure injection under the skin may have serious consequences and may require urgent treatment.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Dry Chemical
Foam
Carbon Dioxide

Firefighting Instructions: Caution, spilled material is slippery. Material will not burn unless preheated. Product will float and can be reignited on surface of water. Do not use a direct stream of water as it may spread fire. Use water to cool fire exposed containers. Water may be used to flush spills away from exposure. Do not enter confined fire space without adequate protective clothing and an approved positive pressure self-contained breathing apparatus.

Hazardous Combustion Products: Carbon dioxide, carbon monoxide and unidentified organic compounds may be formed upon combustion.

6. ACCIDENTAL RELEASE MEASURES

Spilled material is slippery. Eliminate all ignition sources. Isolate hazard area and restrict access. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Dike and contain land spills; contain spills to water by booming. For large spills remove by mechanical means and place in containers. Adsorb residue or small spills with adsorbent material and remove to non-leaking containers for disposal. Notify appropriate environmental agency(ies). After area has been cleaned up to the satisfaction of regulatory authorities, flush area with water to remove trace residue. Dispose of recovered material as noted under Disposal Considerations.

7. HANDLING AND STORAGE

Handling: Avoid excessive heat, formation of oil mist, breathing of vapours and mist of hot oil and prolonged or repeated contact with skin. Launder contaminated clothing prior to reuse. Use good personal hygiene.

Storage: Store in a cool, dry, well ventilated area, away from heat and ignition sources.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The following information, while appropriate for this product, is general in nature. The selection of personal protective equipment will vary depending on the conditions of use.

OCCUPATIONAL EXPOSURE LIMITS (Current ACGIH TLV/TWA unless otherwise noted):
North American exposure limits have not been established for the product. Consult local and provincial authorities for acceptable values.
Oil mist (mineral): 5 mg/m3 (STEL: 10 mg/m3)

Mechanical Ventilation: Not normally required. Local ventilation is recommended if oil mist is present or if exposure limit is exceeded. Make up air should always be supplied to balance air exhausted (either generally or locally).

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: No special eye protection is routinely necessary. Wear safety glasses as appropriate.

Skin Protection: Not normally needed. Chemically-resistant gloves should be worn for frequent or prolonged contact with this product. Best protection is provided by: Nitrile

Respiratory Protection: Not normally required under intended conditions of use. If airborne concentration is high (e.g. when product is heated), use a NIOSH-approved chemical cartridge respirator with organic vapour cartridges in combination with a P95 particulate filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid	**Odour:**	Hydrocarbon Odour
Appearance:	Amber colour	**Odour Threshold:**	Not available
Pour Point	< -33	**Boiling Point**	
Vapour Pressure (absolute):		**Vapour Density (air = 1):**	Not available
Density:	860 - 880 kg/m3 @ 15 °C	**Flash Point**	COC > 190
Specific Gravity (Water = 1):	0.87	**Lower Flammable Limit:**	Not available
pH:	Not applicable	**Upper Flammable Limit:**	Not available
Viscosity:	11 - 12.5 cSt @ 100 °C	**Auto-ignition Temperature:**	Not available
Evaporation Rate (n-BuAc = 1):	Not available	**Partition Coefficient (log K_{OW}):**	Not available
Water Solubility:	Insoluble	**Molecular Weight:**	

10. STABILITY AND REACTIVITY

Chemically Stable: Yes **Hazardous Polymerization:** No
Sensitive to Mechanical Impact: No **Sensitive to Static Discharge:** No
Incompatible Materials: Avoid strong oxidizing agents.
Conditions of Reactivity: Avoid excessive heat, formation of vapours or mists.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Exposure will most likely occur through skin contact or from inhalation of mechanically or thermally generated oil mists.

Irritancy: This product is not a primary skin irritant after exposure of short duration, is not a skin sensitizer and is not irritating to the eyes.

Acute Toxicity: This product is not expected to be irritating and has a low level of toxicity under normal use.

Chronic Effects: Long term intensive exposure to oil mist may cause benign lung fibrosis. Prolonged or repeated contact may cause various forms of dermatitis including folliculitis and oil acne. Used engine oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on actual conditions but the impurities may present risks to health or the environment on disposal. It is possible that prolonged or repeated exposure to used engine oils may cause skin cancer in humans. All used oils should be handled with caution and skin contact avoided as much as possible.

12. ECOLOGICAL INFORMATION

Environmental Effects: The immediate effect of a release is the physical impairment of the environment from the coating of surfaces, resulting in the disruption of oxygen, water and light to flora

and fauna. Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial regulations require and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities.

Biodegradability: Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Waste management priorities (depending on volumes and concentration of waste) are: 1. recycle (reprocess), 2. energy recovery 3. incineration, 4. disposal at a licenced waste disposal facility. Do not attempt to combust waste on-site.

14. TRANSPORT INFORMATION

Canadian Road and Rail Shipping Classification:

This product is not regulated under the Canadian Transportation of Dangerous Goods Regulations for transport by road and rail.

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations (CPR)* and the MSDS contains all the information required by the CPR.

THIS PRODUCT IS NOT A WHMIS CONTROLLED SUBSTANCE.

DSL/NDSL Status: This product, or all components, are listed on the Domestic Substances List, as required under the Canadian Environmental Protection Act. This product and/or all components are listed on the U.S. EPA TSCA Inventory.

Other Regulatory Status: No Canadian federal standard; however, for general discharge guidance, federal installations limited to 15 mg/L for total oil and grease. Provincial criteria are likely and should be requested when notifying provincial authorities.

16. OTHER INFORMATION

Revisions: This MSDS has been reviewed and updated. Changes have been made to: Section 3 Section 4 Section 5 Section 6 Section 8 Section 9 Section 12 Section 13