

Material Safety Data Sheet – Morgan Fuel

Date Prepared: September, 2011

Supersedes: September, 2009

Meets the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the Canada's Workplace Hazards Materials Information System (WHMIS)

1. Product and Company Identification

Product Name	Morgan Fuel (Cool Power, Omega, Pro Pattern, Sidewinder) all grades.	
Other Product Name(s)	Model car and airplane fuel	
Product Use	Fuel for engine in model planes and cars (Aprovisione de combustible para el	
	motor en los planos y los coches modelo)	
Manufacturer	Morgan Fuel, LLC	
	200 West Lee Street	
	Enterprise, Alabama 36330 Information: (334) 347 3525	
Emergency Telephone	(800) 424-9300 (CHEMTREC – US)	
Numbers	703 527 3887 (Outside U.S.)	

2. Hazards Identification

Emergency Overview: Flammable liquid fuel in various colors (see section 9) with alcohol odor. Can irritate skin, eyes and respiratory tract. Harmful or fatal if swallowed. (Contains methyl alcohol.)

Potential Health Effects:

Skin	Causes irritation and dryness. Contact with bare skin may allow some absorption through the skin with harmful effects similar to ingestion of small quantities.
Eyes	Causes irritation
Ingestions	Harmful if swallowed. May cause blindness (methanol content) and unconsciousness. Ingestion of large quantities may be fatal.
Inhalation	Irritating if inhaled. Can cause sleepiness (narcosis), headache, nausea and dizziness.
Chronic Effects	Chronic overexposure can affect the liver and kidneys. Nitromethane is an NTP suspect carcinogen via inhalation and as an animal carcinogen by IARC

3. Composition / Information on Ingredients

Chemical Name	CAS #	Wt. %
Nitromethane	75-52-5	See table
Methyl alcohol	67-56-1	below
Lubricant (not hazardous)	Trade Secret	balance

Composition Table

Product	% Nitromethane	% Methanol
Cool Power FAI		60 – 100
Omega FAI		00 - 100
Cool Power Bully/Tartan	1 – 5	60 – 100
Cool Power 5%, Super "T", Jet 7%		
Omega 5%, Super "T"	5 – 10	60 – 100
Omega Jet 7%		

Product	% Nitromethane	% Methanol
Cool Power 10%, MV 10%, Heli 12.5%	10 – 30	60 – 100
Omega 10%	10 - 30	60 - 100
Cool Power 25%, 40%		
Cool Power HP Heli 15%, 20%, 30%		
Omega 25%, 40%	15 – 40	40 - 70
ProPattern 25%, 30%, 40%	15 – 40	40 - 70
Sidewinder Race 30%, 40%		
Sidewinder Pro 25%, 40%, World Champ 30%		
Cool Power 15%, 4-Cycle, Jet 15%		
Cool Power MV 15%, 4-Cycle, Heli 15%		
Omega 15%, 4-Cycle, Heli-15%		
Omega Jet 15%	15 – 40	60 – 100
ProPattern 20%	15 – 40	00 - 100
Sidewinder Race 16%, 20%, Strike Team 30%		
Sidewinder Pro 16%, 20%, Backyard Basher		

4. First A	id Measures
Skin	Wash with plenty of soap and water. Remove contaminated clothing and launder before reuse. Get prompt medical attention for irritation or any other symptom.
Eyes	Immediately flush with water for at least 15 minutes lifting the upper and lower eyelids intermittently. Get prompt medical assistance
Ingestions	Contact a doctor or poison control center immediately Do not induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air. Get prompt medical assistance for irritation or any other symptom.
Advice to	Product contains methanol and can cause blindess via systemic toxicity. Ethanol has
Physician	been used to compete with the metabolic pathway for methanol. Apply protocols for methanol poisoning. Treat other effects symptomatically.

5. Fire Fighting Measures

Extinguishing Media:	Dry chemical, alcohol-type foam, carbon dioxide, water spray or
	fog. Do not use direct water stream as this spread burning liquid.
Fire/Explosion Hazards:	Vapors can travel to a source of ignition and flash back.
Fire Fighting Procedures:	Cool intact containers to prevent rupture from heat.
Flammable Limits:	LEL is 7.1% and UEL is 36% for methanol, 63% for nitromethane
	component.
Flash Point	40 – 45°F (4.4 – 7.2°C) Closed cup
Auto ignition Temperature:	725°F (385°C)
Hazardous Combustion	Carbon monoxide, carbon dioxide and nitrogren oxides are primary
Products:	hazardous combustion products. Some organic vapors from
	lubricants may also be formed.
Sensitivity to Impact:	Impact may rupture containers, spilling flammable liquid.
Sensitivity to Static Discharge:	Liquid may be ignited by static discharges.

6. Accidental Release Measures

Personal Precautions:	Remove all sources of ignition. Provide respiratory protection in the absence of properly ventilated area.
Containment:	Product is shipped in small containers. If many containers are broken open, surround area with clay or other non-absorbing material.

Clean Up:	Absorb with dry sand or earth and place into containers for proper disposal.
Notification	See section 15. Morgan Fuels do not contain reportable quantities in non-bulk
Requirements:	packages.

7. Handling and Storage

Handling:	Avoid contact with skin, eyes and clothing, Use with adequate ventilation. Keep away from children.
Storage:	Store in a cool, dry, ventilated place. Protect from physical damage.

8. Exposure Controls / Personal Protection

Engineering	Normal ventilation for closed containers. For liquid transfers, use local exhaust
Controls:	ventilation to keep exposure below established safe levels (see below).

Personal Protective Equipment:

Eyes and Face:	Wear splash goggles to avoid accidental eye contact.
Respiratory:	Not required for properly ventilated areas. Othewise use a NIOSH approved respirator.
Hands, Arms, and Body:	Rubber or neoprene gloves.

Exposure Guidelines: Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure. As with all nuisance dusts, worker breathing zone concentrations should be measured by validated sampling and analytical methods. The following limits (OSHA and MSHA) apply to this material:

Ingredient	ACGIH TLW	ACGIH STEL	OSHA PEL	OSHAL STEL
Methyl alcohol	200 ppm (skin)	250 ppm	200 ppm	None
Nitromethane	20 ppm	None	100 ppm	None

9. Physical and Chemical Properties

Appearance:	Liquid in various colors:		
	Coolpower - Green	Coolpower Heli – Red	Omega – Pink
	ProPattern - Green	Sidewinder – Red	
Odor:	Alcohol with some unpl	easantness	
Formula:	Mixture		
Molecular Weight:	Mixture		
Specific Gravity:	0.811 – 1.001		
Boiling Point:	149°F (65°C)		
Melting Point:	Not determined		
Evaporation Rate:	1.4 – 2.1 (vs. n-butyl acetate)		
Percent Volatile:	100		
Solubility in Water	90%		
Vapor Density:	1.1 – 2.1		
Vapor Pressure:	27 – 123 mm Hg		
pH (1% solution)	Not determined (organic mixture)		
Flammable Limits:	LEL is 7.1% and UEL is 36% (methanol), 63% (nirtomethane)		
Flash Point	40 – 45°F (4.4 – 7.2°C) Closed cup		
Auto ignition Temperature:	725°F (385°C)		

10. Stability and Reactivity

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Stability:	Normally stable		
Conditions to Avoid:	Heat and sources of ignition.		
Materials to avoid	Strong oxiders can ignite product		
Polymerization:	Will not occur.		
Hazardous Decomposition Carbon dioxide and monoxide. Nitrogen oxides.			
Products			

11. Toxicological Information

Eye:	Methyl Alcohol: Irritant Nitromethane:Mild to moderate irritant
Skin:	Methyl Alcohol: Irritant LD ₅₀ (rabbit) 12,800 mg/kg Nitromethane: Irritant. LD ₅₀ (rabbit) > 2,000 mg/kg
Oral:	Methyl Alcohol: LD ₅₀ 3,000 – 4,000 mg/kg (Pigtail monkey) ; (rat) 5628 mg/kg Nitromethane: LD ₅₀ –(rat) - 940 mg/kg
Inhalation:	Methyl Alcohol: LC_{50} (rat) 64,000 ppm/4 hr. Nitromethane: LC_{50} (rat) >12.75 mg/L 1 hr
Chronic:	Methyl Alcohol: Repeated exposures may affect the ocular nerve and eyesight. Nitromethane: Suspect carcinogen (NTP). In an inhlation bioassay, nitromethane caused tumors in mice (male and female) but not in male rats. Listed as an IARC animal carcinogen (2B).

12. Ecological Information

Acute ecotoxicity:	These products have not been tested as mixtures
Chronic ecotoxicity:	These products have not been tested as mixtures

13. Disposal Considerations

RCRA Status	RCRA Ingnitable waste: D001
Disposal Method:	Incineration recommended

14. Transportation Considerations

DOT Proper Shipping Name:	
Domestic	Flammable liquids, n.o.s. (methanol and nitromethane)
Domestic limited quantity	Consumer Commodity
International	Flammable liquids, toxic, n.o.s. (methanol and nitromethane)
DOT Primary Hazard Class / Division:	Class 3 – flammable liquids
DOT UN / NA Number:	
Domestic	UN 1993
International	UN 1992
DOT Packing Group	I
DOT Label(s), Placard(s), Marking(s):	
Domestic	Flammable Liquid
Domestic limited quantity	ORM - D
International	Flammable Liquid, Toxic
TDG (Canada)	Flammable liquids, toxic, n.o.s. (methanol and nitromethane)
IMDG (International water)	Flammable liquids, toxic, n.o.s. (methanol and nitromethane)

15. Regulatory Information

UNITED STATES:

Toxic Substances Control Act (TSCA)

TSCA Inventory Status:	Listed on TSCA Chemical Inventory
Other TSCA Issues:	None

SARA Title III/CERCLA

Ingredients with "Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs).

		U	
Ingredient		SARA/CERCLA RQ (Ib)	SARA EHS TPQ (Ib)
Methyl Alcohol		5000	None
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Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.

SARA 313 Toxic Chemicals:

The following ingredients are SARA 313 "Toxic Chemicals" and may be subject to annual reporting requirements. CAS numbers and weight percents are found in Section 2.

Ingredient	Comment
Methyl Alcohol	Deminimus level: 1%

State Right-To-Know

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

Ingredient	Weight %	Comment
No ingredients listed.		

Additional Regulatory Information:	None
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CANADA:

WHMIS Classification:	B2, D1A, D2B
WHMIS Ingredient Disclosure List	Methyl alcohol
DSL Status (Domestic substances list)	All ingredients listed on the DSL

Ingredients for this product also found on the chemical inventories of Australia, China, Korea, Japan and the Philippines.

16. Other Information

Changes from previous version: Datasheet format updated and composition data added to comply with WHMIS regulations. Exposure values and flash points updated. Health hazards and first aid instructions updated.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable and suitable to their circumstances.