

MAC'S PREMIUM STARTING FLUID  
NM7216

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)
Product name	MAC'S PREMIUM STARTING FLUID	
Product code	NM7216	
Product Use Description	No data	

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Appearance: aerosol,, colourless

WARNING! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. CONTENTS UNDER PRESSURE. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. CAUSES EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

### Potential Health Effects

#### **Exposure routes**

Inhalation, Skin absorption, Skin contact, Eye Contact

#### **Eye contact**

Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

#### **Skin contact**

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

MAC'S PREMIUM STARTING FLUID  
NM7216

### **Ingestion**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

### **Inhalation**

Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

### **Aggravated Medical Condition**

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

### **Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), high blood pressure, effects on heart rate, effects on breathing rate

### **Target Organs**

Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans.

### **Carcinogenicity**

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

### **Reproductive hazard**

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

MAC'S PREMIUM STARTING FLUID  
NM7216**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Hazardous Components</b>	<b>CAS-No.</b>	<b>Concentration</b>
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	>=60-<70%
ETHYL ETHER	60-29-7	>=20-<30%
CARBON DIOXIDE	124-38-9	>=1.5-<5%

**4. FIRST AID MEASURES****Eyes**

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

**Skin**

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

**Ingestion**

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**Inhalation**

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Notes to physician**

**Hazards:** Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

**Treatment:** No information available.

**5. FIRE-FIGHTING MEASURES**

MAC'S PREMIUM STARTING FLUID  
NM7216

**Suitable extinguishing media**

Water mist, Carbon dioxide (CO<sub>2</sub>), Dry chemical

**Hazardous combustion products**

Aldehydes, carbon dioxide and carbon monoxide, organic compounds, Hydrocarbons

**Precautions for fire-fighting**

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

**NFPA Flammable and Combustible Liquids Classification**

Flammable Liquid Class IA

<b>6. ACCIDENTAL RELEASE MEASURES</b>
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**Personal precautions**

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

**Environmental precautions**

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

**Methods for cleaning up**

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

<b>7. HANDLING AND STORAGE</b>
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**Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. DO NOT puncture or incinerate container.

MAC'S PREMIUM STARTING FLUID  
NM7216**Storage**

Do not store near extreme heat, open flame, or sources of ignition. Maximum recommended storage temperature 50 degrees C (122 degrees F). Store in a cool, dry, ventilated area.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC 64742-89-8

OSHA Z1	time weighted average	500 ppm
ACGIH	time weighted average	300 ppm
ACGIH	time weighted average	1,370 mg/m3
ETHYL ETHER		60-29-7
ACGIH	time weighted average	400 ppm
ACGIH	Short term exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	400 ppm
OSHA Z1	Permissible exposure limit	1,200 mg/m3
CARBON DIOXIDE		124-38-9
ACGIH	time weighted average	5,000 ppm
ACGIH	Short term exposure limit	30,000 ppm
NIOSH	Recommended exposure limit (REL):	5,000 ppm
NIOSH	Recommended exposure limit (REL):	9,000 mg/m3
NIOSH	Short term exposure limit	30,000 ppm
NIOSH	Short term exposure limit	54,000 mg/m3
OSHA Z1	Permissible exposure limit	5,000 ppm
OSHA Z1	Permissible exposure limit	9,000 mg/m3

**General advice**

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

**Exposure controls**

**MAC'S PREMIUM STARTING FLUID  
NM7216**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Eye protection**

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

**Skin and body protection**

Wear resistant gloves (consult your safety equipment supplier).  
Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

**Respiratory protection**

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	aerosol
<b>Form</b>	aerosol
<b>Colour</b>	colourless
<b>Odour</b>	ether-like
<b>Boiling point/boiling range</b>	34.60 °C @ 1,013.23 hPa Calculated Phase Transition Liquid/Gas
<b>pH</b>	No data
<b>Flash point</b>	-45.00 °C Calculated Flash Point
<b>Evaporation rate</b>	No data
<b>Lower explosion limit/Upper explosion limit</b>	1.05 %(V) / 36.5 %(V)
<b>Vapour pressure</b>	717.261 hPa @ 25 °C Calculated Vapor Pressure
<b>Vapour density</b>	No data
<b>Density</b>	0.706 g/cm3 @ 60.01 °F / 15.56 °C
<b>Solubility</b>	No data

MAC'S PREMIUM STARTING FLUID  
NM7216

**Partition coefficient: n-octanol/water**  
**log Pow**  
**Autoignition temperature**

No data  
no data available  
No data

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

Heat, flames and sparks.

### Incompatible products

halogens, Strong oxidizing agents

### Hazardous decomposition products

Aldehydes, carbon dioxide and carbon monoxide, organic compounds, Hydrocarbons

### Hazardous reactions

Product will not undergo hazardous polymerization.

### Thermal decomposition

No data

## 11. TOXICOLOGICAL INFORMATION

### Acute oral toxicity

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	: LD 50 Rat: > 8,000 mg/kg
ETHYL ETHER	: LD 50 Rat: 3,230 - 3,920 mg/kg
CARBON DIOXIDE	: no data available

### Acute inhalation toxicity

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	: LC 50 Rat: 3400 ppm, 4 h
ETHYL ETHER	: LC 50 Rat: 32,000 mg/l, 4 h
CARBON DIOXIDE	: no data available

### Acute dermal toxicity

SOLVENT NAPHTHA (PETROLEUM), LIGHT	: LD 50 Rat: > 4,000 mg/kg
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MAC'S PREMIUM STARTING FLUID  
NM7216

ALIPHATIC  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

## 12. ECOLOGICAL INFORMATION

### Biodegradability

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

### Bioaccumulation

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

### Ecotoxicity effects

#### Toxicity to fish

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

#### Toxicity to daphnia and other aquatic invertebrates.

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

#### Toxicity to algae

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

#### Toxicity to bacteria

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

MAC'S PREMIUM STARTING FLUID  
NM7216**Biochemical Oxygen Demand (BOD)**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Chemical Oxygen Demand (COD)**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Additional ecological information**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**13. DISPOSAL CONSIDERATIONS****Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

**14. TRANSPORT INFORMATION****REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

UN	AEROSOLS	2			
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN	Aerosols, flammable (engine starting fluid)	2.1			
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

MAC'S PREMIUM STARTING FLUID  
NM7216

UN	Aerosols, flammable (engine starting fluid)	2.1
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**INTERNATIONAL MARITIME DANGEROUS GOODS**

UN	1950	AEROSOLS	2.1
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**TRANSPORT CANADA - INLAND WATERWAYS**

UN	1950	AEROSOLS	2.1
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**TRANSPORT CANADA - RAIL**

UN	1950	AEROSOLS	2.1
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**TRANSPORT CANADA - ROAD**

UN	1950	AEROSOLS	2.1
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**U.S. DOT - INLAND WATERWAYS**

1950	ORM-D, CONSUMER COMMODITY	ORM
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**U.S. DOT - RAIL**

1950	ORM-D, CONSUMER COMMODITY	ORM
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**U.S. DOT - ROAD**

1950	ORM-D, CONSUMER COMMODITY	ORM
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**\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**15. REGULATORY INFORMATION****California Prop. 65**

WARNING! This product contains a chemical known in the State of California to cause cancer. BENZENE

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm. BENZENE  
TOLUENE

MAC'S PREMIUM STARTING FLUID  
NM7216**SARA Hazard Classification**Acute Health Hazard  
Fire Hazard  
Sudden Release of Pressure Hazard**New Jersey RTK Label Information**

n-HEPTANE	142-82-5
ETHYL ETHER	60-29-7
CARBON DIOXIDE	124-38-9

**Pennsylvania RTK Label Information**

n-HEPTANE	142-82-5
ETHYL ETHER	60-29-7
CARBON DIOXIDE	124-38-9

**Notification status**

EU. EINECS	y (positive listing)
US. Toxic Substances Control Act	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA).	y (positive listing)
Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	
Japan. Kashin-Hou Law List	n (Negative listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)

**Reportable quantity - Product**

US. EPA CERCLA Hazardous Substances (40 CFR 302)	340 lbs
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**Reportable quantity-Components**

ETHYL ETHER	60-29-7	100 lbs
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	HMIS	NFPA
Health	2	1
Flammability	4	4

# ASHLAND

## SAFETY DATA SHEET

MAC'S PREMIUM STARTING FLUID  
NM7216

Page: 12  
Revision Date: 01/14/2010  
Print Date: 1/12/2011  
MSDS Number: R0340955  
Version: 3.0

Physical hazards	0	
Instability		0
Specific Hazard	--	--

### 16. OTHER INFORMATION

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. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).