Section 1 - Chemical Product and Company Identification

1.1 Product Name: **M5**

1.2 VP Racing Fuels, Inc., 7124 Richter Road, Elmendorf, TX 78112, 210.635.7744

1.3 Recommended Use: Racing Fuel

1.4 **REstrictions on USE** THIS FUEL IS FOR RACING VEHICLE USE ONLY! NOT LEGAL FOR STREET DRIVEN MOTOR VEHICLE

1.5 Supplier: VP Racing Fuels Pty Ltd, Unit 24 85-115 Alfred Road, Chipping Norton, NSW 2170, Australia 02 9723 4233, **Emergency Telephone**: 0421 116 838

1.6 **Emergency Telephone:** CHEMTREC 800-424-9300

   International Emergency Telephone Number: +1-703-527-3887
   Australia (Sydney) + (61)-290372994

1.7 See Section 16.3 for CHEMTREC in Country Emergency Numbers

Section 2 - Hazards Identification

2.1 **GHS Hazard**

<table>
<thead>
<tr>
<th>Hazard Classes</th>
<th>Hazard Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Flammable liquid/vapor</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity single exposure</td>
<td>Category 3</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity repeated exposure</td>
<td>Category 1</td>
</tr>
<tr>
<td>Eye Irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Skin Irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Acute Toxicity (Inhalation)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute Toxicity (Dermal)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Acute Toxicity (Oral)</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

2.2 **Signal Word:** Danger
2.3 **Pictograms:**

- Flame
- Health Hazard
- Irritant
- Toxic

2.4 **Hazard Statements**

**PHYSICAL HAZARDS:**

H225: Highly flammable liquid and vapor

**HEALTH HAZARDS:**

H301 + H311: Toxic if swallowed or in contact with skin
H315: Causes skin irritation
H319: Causes serious eye irritation
H332: Harmful if inhaled
H336: May cause drowsiness or dizziness
H337: Causes damage to organs

**ENVIRONMENTAL HAZARDS:**

None

**PRECAUTIONARY STATEMENTS:**

P102: Keep out of reach of children
P202: Do not handle until all safety precautions have been read and understood
P210: Keep away from sparks and open flames - No smoking
P260: Do not breathe vapors
P280: Wear protective gloves, clothing and eye protection

**RESPONSE STATEMENTS:**

P301 +310+ P331: IF SWALLOWED: USA Immediately call the National POISON CENTER at **800-222-1222.** OUT SIDE USA Immediately call poison center or doctor. DO NOT induce vomiting
P303+P361+353: IF ON SKIN Take off immediately all contaminated clothing. Rinse skin with water
P304+340: IF INHALED, Remove to fresh air and keep comfortable for breathing
P305+P351: IF IN EYES rinse cautiously with water for at least 15 minutes
P306+P361: IF ON CLOTHING, Take off contaminated clothing
P370: In case of fire use foam, carbon dioxide, dry chemical to extinguish fire
P376: Stop leaks if safe to do so. See section 6 for proper clean up

**STORAGE STATEMENTS:**

P403: Keep Cool Store in a well-ventilated place
M5
Conforms to OSHA CFR 29 1910.1200 and aligns to the United Nations Globally Harmonized System
Conforms to The United Nations Regulation Globally Harmonized System
Conforms to Regulation (EC) No 1272/2008 and aligns to the United Nations Globally Harmonized System
Conforms to the Australian Preparation of Safety Data Sheets for Hazardous Chemicals under section 274 of the Work Health and Safety Act

DISPOSAL STATEMENTS: P501: Dispose of content and/or container in accordance with local, regional, national or international regulations

2.5 Hazards not otherwise classified (HNOC) or not covered by GHS: Repeated exposure may cause skin dryness or cracking.

Section 3 - Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>EC#</th>
<th>Chemical Names</th>
<th>Percent</th>
<th>Other Identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>Blend of Aliphatic and Aromatic Hydrocarbons C-2 to C-20</td>
<td>7-8%</td>
<td>None</td>
</tr>
<tr>
<td>67-56-1</td>
<td>200-659-6</td>
<td>Carbinol</td>
<td>89-92%</td>
<td>Hydroxymethane</td>
</tr>
<tr>
<td>75-52-5</td>
<td>200-876-6</td>
<td>Nitrocarbol</td>
<td>1-3%</td>
<td>NM</td>
</tr>
</tbody>
</table>

3.2 Blend Contains

<table>
<thead>
<tr>
<th>Chemical Names</th>
<th>CAS#</th>
<th>EC#</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Methylbutane</td>
<td>78-78-4</td>
<td>201-142-8</td>
</tr>
<tr>
<td>Pentamethylene</td>
<td>278-92-3</td>
<td>206-016-6</td>
</tr>
</tbody>
</table>

3.3 Trade Secret Provision and Chemical Concentration Disclosure: In accordance with OSHA and GHS Regulations we have withheld specific percentages of the chemicals in this mixture. The chemical concentrations have been disclosed as a range and are applicable to the hazards as identified in this Safety Data Sheet

Section 4 - First Aid Measures

4.1 Eye: Contact with the eyes can cause serious irritation. Symptoms may include discomfort or pain and redness. Severe overexposure can result in swelling of the conjunctiva along with tissue damage.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

4.2 Skin: Prolonged and repeated liquid contact can cause defatting and drying of the skin and can lead to irritation and/or dermatitis.

Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

4.3 Ingestion: Liquid ingestion can cause inebriation, headache, gastrointestinal pain, nausea, and vomiting leading to central nervous system depression. Aspiration of liquid into the lungs must be avoided as even small quantities in the lungs can produce chemical pneumonia, pulmonary edema and even death.

Ingestion: Do NOT induce vomiting. Get medical aid immediately.

4.4 Inhalation: Prolonged breathing of high vapor concentrations can produce headache, dizziness, nausea, and impaired vision. Excessive overexposure can cause central nervous system depression, loss of consciousness, liver damage and death resulting from respiratory failure.
Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult and IF TRAINED, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation without protection.

4.5 After first aid, get appropriate paramedic, or community medical support. The severity of outcome following ingestion may be more related to the time between ingestion and treatment, rather than the amount ingested. Therefore, there is a need for rapid treatment of any ingestion exposure.

4.6 Note to Physicians: If you determine that a medical emergency exists and the specific chemical identity is necessary for emergency or first-aid treatment we will immediately disclose the specific chemical identity. Call CHEMTREC 800-424-9300 or 703-527-3887. We will require a written statement of need and confidentiality agreement, in accordance with OSHA’s Trade Secret Regulations as soon as circumstances permit. In non-emergency situations, we will upon written request disclose a specific chemical identity.

Section 5 - Fire-Fighting Measures

5.1 General Fire Hazards
Use water to cool containers exposed to fire

5.2 Hazardous Combustion Products
Avoid fumes of burning product.

5.3 Extinguishing Media
Carbon dioxide, dry chemical, foam

5.4 Fire Fighting Equipment/Instructions
Fire fighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.

Section 6 - Accidental Release Measures

6.1 Spill /Leak Procedures: Ventilate area highly flammable. Spillages of liquid product will create a fire hazard and may form an explosive atmosphere. Keep all sources of ignition away from the spill.

6.2 Spills: Avoid direct contact with material. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers or waterways. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite or diatomaceous earth and place in a container for disposal.

Section 7 - Handling and Storage

7.1 Handling Precautions: Wash hands and exposed skin thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid ingestion and contact with eyes, skin or clothing. Keep container tightly closed. Avoid inhalation.

7.2 Storage Requirements: Store in a tightly closed container in a cool, dry and well-ventilated area.

Section 8 - Exposure Controls / Personal Protection

8.1

<table>
<thead>
<tr>
<th>Chemical Names</th>
<th>ACGIH- TLV</th>
<th>OSHA - PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blend of Aliphatic and Aromatic Hydrocarbons C-2 to C-20</td>
<td>600 ppm TWA</td>
<td>*600 ppm TWA</td>
</tr>
<tr>
<td>Nitrocarbol</td>
<td>50 ppm TWA</td>
<td>*100 ppm TWA</td>
</tr>
<tr>
<td>Carbinol</td>
<td>200 ppmTWA</td>
<td>*250ppmTWA</td>
</tr>
</tbody>
</table>
8.2 STEL = Short-term Exposure Limit.
ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value.
OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.
NOTE: TWA Means "TWA is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded. *Listed on the OSHA Z1 or Z2 Table.

8.3 Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below TLV/PELs Local exhaust ventilation are preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

8.4 Contaminated Equipment: Separate contaminated work clothes from street clothes and launder before reuse. Remove this material from your shoes and clean personal protective equipment.

8.5 Personal protective equipment
8.5.1 Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.5.2 Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use. Select gloves tested to the ANSI/ISEA 105-2011 or European EN374 Standard.
Full contact: Nitrile rubber
Splash contact: Nitrile rubber
This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use. It should not be construed as offering an approval for any specific use scenario.

8.5.3 Eye protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

8.5.4 Skin and body protection
Impervious clothing, Flame retardant antistatic protective clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

8.6 Protective Clothing Pictograms
Section 9 - Physical and Chemical Properties

9.1 Physical State: Liquid
Appearance: Clear
Odor: Pungent
Vapor Pressure: 141mmHg@21°C
Vapor Density (Air=1): 1.1
Specific Gravity (H2O=1): .75
pH: N/A

Water Solubility: Completely miscible
Flash Point: 49.5 °F, 9.7 °C - closed cup
Boiling Point: 149 °F, 65 °C
Freezing/Melting Point: -144 °F, -98 °C
Viscosity: Not Available
Auto ignition Temperature: 851.0 °F, 455.0 °C at 1,013 hPa (760 mmHg)

Section 10 - Stability and Reactivity

10.1 Stability: Stable under ordinary conditions of use and storage
10.2 Polymerization: Hazardous polymerization has not been reported
10.3 Chemical Incompatibilities: Strong oxidizing agents
10.4 Hazardous Decomposition Products: Combustion produces carbon monoxide and carbon dioxide
10.5 Conditions to Avoid: Avoid heat, sparks open flames and other ignition sources

Section 11- Toxicological Information

11.1 Product Name Results Species Dose Exposure
| Blend of Aliphatic and Aromatic Hydrocarbons C-2 to C-20 | Oral LD50 Rat | 6800 mg/kg | Non Listed |
| Nitrocarbol | Oral LD50 Rat | 940 mg/kg | None Listed |
| Carbinol | Oral LD50 Rat | 2228 mg/kg | None Listed |

11.1.1 OECD Guideline 401 Tests results found in the European Chemical Agency Data Base shows that components of this product to be Acute Oral Toxicity.

11.1.2 OECD Guideline 403 Tests results found in the European Chemical Agency Data Base shows that components of this product to be Harmful Inhalation Toxicity.

11.1.3 OECD Guideline 402 Tests results found in the European Chemical Agency Data Base shows that components of this product to Acute Dermal Toxicity.

11.2 Route of Entry: Inhalation, Ingestion, Absorption, Skin and/or Eye Contact

11.3 Aspiration Hazard: None

11.4 Acute Toxicity: Toxic if swallowed, in contact with skin or if inhaled

11.5 Mutagenicity: None

11.6 Skin Corrosion/Irritation: Causes skin irritation. Repeated exposure may cause skin dryness or cracking.
11.7 **Serious Eye Damage/Irritation:** Causes eye irritation.

11.8 **Specific Target Organ Toxicity (Single Exposure):** May cause drowsiness and dizziness.

11.9 **Reproductive toxicity:** None

11.10 **Specific Target Organ Toxicity (Repeated Exposure):** Contains material which may cause damage to the following organs: kidneys, lungs, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).

11.11 **Signs and Symptoms:** Contains material which may cause damage to the following organs: Eyes, Kidney, Liver, Heart, Central nervous system. Symptoms may be delayed.

11.12 **Carcinogenicity:** Yes

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>IARC</th>
<th>ACGIH</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blend of Aliphatic and Aromatic Hydrocarbons C-2 to C-20</td>
<td>Not classifiable as a human carcinogen</td>
<td>Not classifiable as a human carcinogen</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Nitrocarbol</td>
<td>Substance is possibly carcinogenic to humans</td>
<td>Confirmed animal with unknown relevance to humans</td>
<td>Substance is reasonably anticipated to be a carcinogen</td>
<td>Yes</td>
</tr>
<tr>
<td>Carbinol</td>
<td>Not listed</td>
<td>Confirmed Human Carcinogen</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

11.12.1 OECD Guideline 453 Tests results found in the European Chemical Agency Data Base shows that components of this product to cause cancer.

### Section 12 - Ecological Information

12.1

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Results</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blend of Aliphatic and Aromatic Hydrocarbons C-2 to C-20</td>
<td>Not expected to be toxic to aquatic organisms.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrocarbol</td>
<td>IC50 36 mg/l</td>
<td>Algae</td>
<td>72 hours</td>
</tr>
<tr>
<td>Nitrocarbol</td>
<td>EC50 450 mg/l</td>
<td>Daphnia</td>
<td>24 hours</td>
</tr>
<tr>
<td>Nitrocarbol</td>
<td>LC50 460 mg/l</td>
<td>Fish</td>
<td>58 hours</td>
</tr>
<tr>
<td>Carbinol</td>
<td>LC50 29.4 mg/L</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>Carbinol</td>
<td>LC50 22,200 mg/L</td>
<td>Daphnia</td>
<td>48 hours</td>
</tr>
</tbody>
</table>

**Toxicity:** This chemical is not regarded as toxic to aquatic organisms. However **DO NOT** discharge into a sewer or waterway.

12.2 **Mobility:** Floats on water

12.3 **Persistence/degradability:** No date available on this product

12.4 **Bioaccumulation:** No date available on this product

12.5 **Other adverse effects:** No date available on this product
Section 13 - Disposal Considerations

13.1 Disposal: DO NOT REUSE EMPTY CONTAINER! Container should be completely emptied prior to discard. Container with residues should be considered to be hazardous wastes. Contact a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations.

Section 14 - Transport Information

14.1 DOT Transport Information

ID No.: UN 1992
Shipping Name: Flammable, liquids, toxic n.o.s. (Carbinol, Pentamethylene)
Hazard Class: 3, (6.1)
Packing Group: II
Label: Flammable
Placard: Flammable

14.2 TDG Canadian Transport Information

ID No.: UN 1992
Shipping Name: Flammable, liquids, toxic n.o.s. (Carbinol, Pentamethylene)
Hazard Class: 3, (6.1)
Packing Group: II
Label: Flammable
Placard: Flammable

14.3 IMDG Transport Information

ID No.: UN 1992
Shipping Name: FLAMMABLE, LIQUIDS, TOXIC N.O.S. (Carbinol, Pentamethylene)
Hazard Class: 3, (6.1)
Packing Group: II
Flash Point: (9.7 °C c.c.)
EmS Number: F-E, S-D
Label: Flammable
Placard: Flammable
M5

Conforms to OSHA CFR 29 1910.1200 and aligns to the United Nations Globally Harmonized System
Conforms to The United Nations Regulation Globally Harmonized System
Conforms to Regulation (EC) No 1272/2008 and aligns to the United Nations Globally Harmonized System
Conforms to the Australian Preparation of Safety Data Sheets for Hazardous Chemicals under section 274 of
the Work Health and Safety Act

14.4 ADR/RID Transport Information

ID No.: UN 1992
Shipping Name: Flammable, liquids, toxic n.o.s. (Carbinol, Pentamethylene)
Hazard Class: 3(6.1)
Packing Group: II
Label: Flammable
Placard: Flammable
Classification Code: FT1

14.5 Australian Dangerous Goods Transport Information

ID No.: UN 1992
Shipping Name: Flammable, liquids, toxic n.o.s. (Carbinol, Pentamethylene)
Hazard Class: 3
Packing Group: II, (6.1)
Label: Flammable
Placard: Flammable
This Hazchem Code applies to PG I & II
Hazchem 3WE HIN 336

Section 15 - Regulatory Information

15.1 US Regulations

US. Toxic Substances Control Act: All components of this product are on the TSCA Inventory or are exempt from
TSCA Inventory requirements under 40 CFR 720.30

CERCLA Hazardous Substances and corresponding RQs: Carbinol 5000 pounds

SARA Community Right-to-Know Program: Pentamethylene, Carbinol

Clean Water Act: None

Clean Air Act: Carbinol

OSHA: All ingredients are regulated by 1910.1200

State Regulations
California prop. 65: Carbinol Cancer
Chemicals on the following State Right to Know Lists:

**Massachusetts:** All components of this product are on the Massachusetts Inventory or are exempt from Inventory requirements

**New Jersey** All components of this product are on the New Jersey inventory or are exempt from Inventory requirements

**Pennsylvania:** All components of this product are on the Pennsylvania Inventory or are exempt from Inventory requirements

**15.2 Canadian Regulation:**
The following substances are specified on the public Portion of the Domestic Substances List (DSL): All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

**15.3 Europe Regulations**
All substances contained in this product are listed on the EU directives or are not required to be listed.

**15.4 International Regulations:**
**Australian Inventory of Chemical Substance:** All components of this product are on the Inventory or are exempt from Inventory requirements.

**National Existing Chemical Inventory in Taiwan:** All components of this product are on the Inventory or are exempt from Inventory requirements.

**Philippine Inventory of Chemicals and Chemical Substances** All components of this product are on the Inventory or are exempt from Inventory requirements.

**China Existing Chemical Inventory:** All components of this product are on the Inventory or are exempt from Inventory requirements.

### Section 16 - Other Information

**16.1 Disclaimer:** The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. HOWEVER NO responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above is furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use.

**16.2 References:** CHEMpendium data base of Canadian Centre for Occupational Health and Safety (CCOHS), JJ Keller on Line, European Chemical Agency Data Base and MSDS and SDS of chemicals in this mixture.
16.3 CHEMTREC In country emergency dial numbers:

- Australia (Sydney) + (61)-290372994
- China 4001-204937 must be call within China
- Germany 0800-181-7059 must be call within Germany
- Germany (Frankfurt) + (49)-6964350840
- Russia 8-800-100-6346 Must be call within Russia

16.4 SDS Preparation Date: 07/23/2015
SDS Previous issue Date: None
Prepared by SJC Compliance Education, Inc
16516 El Camino Real Suite 417
Houston, TX 77062