

C5 Fuel Additive

## IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

# SAFETY DATA SHEET

**Product name**

**C5 Fuel Additive**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

**1.**

**Emergency telephone number  
(with hours of operation)**

:

**Supplier/Manufacturer**

:

:

**Use of the  
substance/preparation**

: Fuel additive.

**Identification of the substance or preparation**

**Product type** : Liquid.

**e-mail address of person  
responsible for this SDS**

:

VP Racing Fuels

7124 Richter Rd

Elmendorf, TX 78112

reachinfo@vpracingfuels.com

CHEMTREC, U.S. : +1-800-424-9300 International: +1-703-527-3887

## IDENTIFICATION OF SUPPLIER

**Importer Name** VP RACING FUELS Pty Ltd

**Address** Unit 24

85-115 Alfred Road

Chipping Norton NSW 2170

**Telephone Number** 02 9723 4233

**Emergency Telephone** 0421 116 838

## 2. HAZARDS IDENTIFICATION

**Classification** T; R25

Xn; R21, R65

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The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Human health hazards** : Toxic if swallowed. Harmful in contact with skin. Harmful: may cause lung damage if swallowed.

**See section 11 for more detailed information on health effects and symptoms.**

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/preparation** Preparation

Occupational exposure limits, if available, are listed in section 8.

:

**CAS  
number**

**Ingredient name % EC number Classification**

Distillates (petroleum), hydrotreated light 64742-47-8 60 - 100 265-149-8 Xn; R65 [1]

Tricarbonyl(methylcyclopentadienyl)manganese 12108-13-3 1 - 5 235-166-5 T+; R28  
T; R24

[1] [2]

Solvent naphtha (petroleum), light aromatic 64742-95-6 1 - 5 265-199-0 Xn; R65 [1]

1,2,4-Trimethylbenzene 95-63-6 0.1 - 1 202-436-9 R10

Xn; R20

Xi; R36/37/38

N; R51/53

[1] [2]

Mesitylene 108-67-8 0.1 - 1 203-604-4 R10

Xi; R37

N; R51/53

[1] [2]

Propylbenzene 103-65-1 0.1 - 1 203-132-9 R10

Xn; R65

Xi; R37

N; R51/53

[1]

Cumene 98-82-8 0.1 - 1 202-704-5 R10

Xn; R65

Xi; R37

N; R51/53

[1] [2]

**See section 16 for the full text of the R-phrases**

**declared above**

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

**There are no additional ingredients present which, within the current knowledge of the supplier and in the**

**concentrations applicable, are classified as hazardous to health or the environment and hence require**

**reporting in this section.**

**Date of issue :** 09/30/2008 **Page:** 1/7

**C5 Fuel Additive**

**4.**

**Notes to physician** No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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## **FIRST AID MEASURES**

**See section 11 for more detailed information on health effects and symptoms.**

**Protection of first-aiders :** No action shall be taken involving any personal risk or without suitable training. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Do not induce vomiting. Never give anything by mouth to an unconscious person.

Get medical attention.

If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

In case of contact, immediately flush skin copiously with water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention.

Check for and remove any contact lenses. In case of contact with eyes, rinse

immediately with plenty of water. Get medical attention.

**Eye contact :**

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:  
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**Skin contact**

**Ingestion**

**Inhalation**

## **5. FIRE-FIGHTING MEASURES**

**Hazardous thermal**

**decomposition products**

**Special exposure hazards**

Decomposition products may include the following materials:

carbon dioxide

carbon monoxide

metal oxide/oxides

Combustible liquid.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Special protective**

**equipment for fire-fighters**

Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Extinguishing media**

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Do not use water jet.

**Suitable :**

**Not suitable :**

**Environmental precautions**

**Personal precautions**

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas.

Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## **6. ACCIDENTAL RELEASE MEASURES**

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: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Large spill :**

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate

waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.

**Small spill :**

**Methods for cleaning up**

**Date of issue :** 09/30/2008 **Page:** 2/7

**C5 Fuel Additive**

**Handling**

## **HANDLING AND STORAGE**

**Storage**

**7.**

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosionproof electrical (ventilating, lighting and material handling) equipment. Use nonsparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Packaging materials**

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

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**Recommended :** Use original container.

**Ingredient name Occupational exposure limits**

**Recommended monitoring**

**procedures**

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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Tricarbonyl(methylcyclopentadienyl)manganese **EH40/2005 WELs (United Kingdom (UK), 8/2007).**

TWA: 0.5 mg/m<sup>3</sup>, (as Mn) 8 hour(s).

1,2,4-Trimethylbenzene **EH40/2005 WELs (United Kingdom (UK), 8/2007).**

TWA: 125 mg/m<sup>3</sup> 8 hour(s).

TWA: 25 ppm 8 hour(s).

Mesitylene **EH40/2005 WELs (United Kingdom (UK), 8/2007).**

TWA: 125 mg/m<sup>3</sup> 8 hour(s).

TWA: 25 ppm 8 hour(s).

Cumene **EH40/2005 WELs (United Kingdom (UK), 8/2007). Skin**

STEL: 250 mg/m<sup>3</sup> 15 minute(s).

STEL: 50 ppm 15 minute(s).

TWA: 125 mg/m<sup>3</sup> 8 hour(s).

TWA: 25 ppm 8 hour(s).

#### **Occupational exposure controls**

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Exposure controls**

**Respiratory protection** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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**Date of issue** : 09/30/2008 **Page:** 3/7

**C5 Fuel Additive**

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Hand protection** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

#### **Eye protection**

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**Skin protection** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

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**Hygiene measures** : Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

158 to 172°C (316.4 to 341.6°F)

## **PHYSICAL AND CHEMICAL PROPERTIES**

#### **Physical state**

#### **Boiling point**

#### **Vapour pressure**

#### **Vapour density**

Liquid.

4.1 [Air = 1]

0.33 kPa (2.5 mm Hg)

**Odour** Aromatic.

**Colour** Red.

**Flash point** Closed cup: >60 and < 90°C (>140 and < 194°F) [Tagliabue.]

**9.**

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#### **General information**

##### **Appearance**

##### **Important health, safety and environmental information**

**Specific gravity** : 0.876 g/cm<sub>3</sub>

##### **Hazardous decomposition**

##### **products**

**Conditions to avoid** Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

## **STABILITY AND REACTIVITY**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.

##### **Stability**

**10.**

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**Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.

## **11. TOXICOLOGICAL INFORMATION**

##### **Potential acute health effects**

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : Toxic if swallowed.

**Skin contact** : Harmful in contact with skin. May cause skin irritation.

**Eye contact** : May cause eye irritation.

##### **Acute toxicity**

**Date of issue** : 09/30/2008 **Page:** 4/7

**C5 Fuel Additive**

## **11. TOXICOLOGICAL INFORMATION**

##### **Potential chronic health effects**

**Chronic effects** : No known significant effects or critical hazards.

**Target organs** Contains material which may cause damage to the following organs: blood, kidneys, liver, upper respiratory tract, central nervous system (CNS), eye, lens or cornea.

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**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

##### **Over-exposure signs/symptoms**

##### **Skin**

##### **Ingestion**

**Inhalation** No specific data.

No specific data.

No specific data.

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:  
:

**Eyes :** No specific data.

Tricarbonyl(methylcyclopentadienyl)manganese Rabbit 140 mg/kg LD50 Dermal -

Rat 8 mg/kg LD50 Oral -

Solvent naphtha (petroleum), light arom. Rat 8400 mg/kg LD50 Oral -

1,2,4-Trimethylbenzene Rat 5 g/kg LD50 Oral -

Mesitylene Rat 5000 mg/kg LD50 Oral -

Propylbenzene Rat 6040 mg/kg LD50 Oral -

Cumene Rabbit 12300 uL/kg LD50 Dermal -

Rat 1400 mg/kg LD50 Oral -

**Product/ingredient name Species Dose Result Exposure**

## 12. ECOLOGICAL INFORMATION

**Other adverse effects :** No known significant effects or critical hazards.

**Aquatic ecotoxicity**

**Environmental effects :** No known significant effects or critical hazards.

Distillates (petroleum), hydrotreated light Acute LC50 2900 ug/L Fish - 96 hours

1,2,4-Trimethylbenzene Acute LC50 17000 ug/L Crustaceans - 48 hours

Acute LC50 7720 to 8280 ug/L Fish - 96 hours

Mesitylene Acute LC50 13000 ug/L

Marine water

Crustaceans - 48 hours

Acute LC50 12520 to 15050

ug/L Fresh water

Fish - 96 hours

Propylbenzene Acute LC50 1550 ug/L Fish - 96 hours

Cumene Acute EC50 10600 to 14100

ug/L

Daphnia - 48 hours

Acute EC50 7400 to 11290

ug/L

Crustaceans - 48 hours

Acute LC50 2700 ug/L Fish - 96 hours

**Product/ingredient name Test / Type Species Dose Exposure**

## 13. DISPOSAL CONSIDERATIONS

**Hazardous waste :** The classification of the product may meet the criteria for a hazardous waste.

The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**Methods of disposal :**

**Date of issue :** 09/30/2008 **Page:** 5/7

**C5 Fuel Additive**

**ADR/RID Class**

## 14.

**International transport regulations**

FLAMMABLE LIQUID,

TOXIC, N.O.S.

(solvent naphtha

(petroleum), light  
aromatic.)  
3 (6.1) III

<sup>6</sup>  
**IMDG Class** FLAMMABLE LIQUID,  
TOXIC, N.O.S.  
(solvent naphtha  
(petroleum), light  
aromatic.)  
3 (6.1) III

<sup>6</sup>  
FLAMMABLE LIQUID,  
TOXIC, N.O.S.  
(solvent naphtha  
(petroleum), light  
aromatic.)  
**IATA Class** UN1992

<sup>6</sup>  
3 (6.1)

## **TRANSPORT INFORMATION**

FLAMMABLE LIQUID, 3 (6.1)  
TOXIC, N.O.S.  
(Solvent naphtha  
(petroleum), light  
aromatic.)  
III

<sup>6</sup>  
UN1992

### **Regulatory information**

**UN number Proper shipping name Classes PG\* Label**

III

UN1992

UN1992

### **ADNR Class**

PG\* : Packing group

### **Additional information**

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-  
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-

## **REGULATORY INFORMATION**

### **15.**

**Safety phrases** S36/37- Wear suitable protective clothing and gloves.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

R25- Toxic if swallowed.

R21- Harmful in contact with skin.

R65- Harmful: may cause lung damage if swallowed.

### **Hazard symbol or symbols**

### **Risk phrases**

### **EU regulations**

### **Contains**

:  
:

⋮

**Product use :** Industrial applications.

Toxic

Tricarbonyl (methylcyclopentadienyl) manganese

**Europe inventory :** Europe inventory: All components are listed or exempted.

**Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC**

**(including amendments) and take into account the intended product use.**

**Date of issue :** 09/30/2008 Page: 6/7

**C5 Fuel Additive**

## **16. OTHER INFORMATION**

**VP RACING FUELS Pty Ltd 02 9723 4233**

**VP RACING FUELS Ltd – Emergency Number 0421 116838**

**Police and Fire Brigade 000**

**Poisons Information Centre 13 11 26**

R10- Flammable.

R28- Very toxic if swallowed.

R25- Toxic if swallowed.

R24- Toxic in contact with skin.

R20- Harmful by inhalation.

R21- Harmful in contact with skin.

R65- Harmful: may cause lung damage if swallowed.

R37- Irritating to respiratory system.

R36/37/38- Irritating to eyes, respiratory system and skin.

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of R-phrases :**  
**referred to in sections 2 and**  
**3 - United Kingdom (UK)**

T+ - Very toxic

T - Toxic

Xn - Harmful

Xi - Irritant

N - Dangerous for the environment

**Full text of classifications :**  
**referred to in sections 2 and**  
**3 - United Kingdom (UK)**

**History**

**Date of issue :** 09/30/2008

**Notice to reader**

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named**

**supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the**

**information contained herein. Final determination of suitability of any material is the sole responsibility of the**

**user. All materials may present unknown hazards and should be used with caution. Although certain hazards**

are described herein, we cannot guarantee that these are the only hazards that exist.

Version : 1 .

Date of issue : 09/30/2008 Page: 7/7