

## Safety Data Sheet

acc. to OSHA HCS

Printing date 07/05/2019

Reviewed on 07/05/2019

### 1 Identification

- **1.1 Product identifier**
- **Trade name:** *GRC RX1*
- **Application of the substance / the mixture** *Racing Fuel*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Haltermann Carless US Inc.  
 901 Wilshire Drive - Suite 570  
 Troy, MI 48084 - United States  
 Tel : +1 (248) 422 6548  
 Email: FDS@h-c-s-group.com*
- **1.4 Emergency telephone number:**  
*4/7 Worldwide Emergency Telephone Number for Hazardous Materials Incident, Spill, Leak, Fire, Exposure or Accident: CHEMTREC on +1 703-741-5970 / +1-800-424-9300*

### 2 Hazard(s) identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation US OSHA & Haz Com 2012 :**



GHS02

*Flam. Liq. 1 H224 Extremely flammable liquid and vapor.*



GHS08

*Muta. 2 H341 Suspected of causing genetic defects.*

*Carc. 1B H350 May cause cancer.*

*STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.*

*Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.*



GHS07

*Skin Irrit. 2 H315 Causes skin irritation.*

*STOT SE 3 H336 May cause drowsiness or dizziness.*

- **2.2 Label elements**
- **Labelling according to Regulation US OSHA & Haz Com 2012 :**  
*The product is classified and labeled according to the CLP regulation.*
- **Hazard pictograms**



GHS02 GHS07 GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**  
*Naphtha (petrol) with a low boiling point ("Complex combination of hydrocarbons made up mainly of paraffin, cycloparaffin, aromatic and olefinic hydrocarbons, with a number of atoms of carbon, prevalently C3 - C12 and boiling point between 30°C and 260°C).*

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ethanol

diisopropyl ether

1,4-dioxane

- **Hazard statements**

H224 Extremely flammable liquid and vapor.

H315 Causes skin irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

- **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 If swallowed: Immediately call a poison center/doctor.

P302+P352 If on skin: Wash with plenty of water.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 4

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH \*1 Health = \*1

FIRE 4 Fire = 4

REACTIVITY 0 Reactivity = 0

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **3.2 Chemical characterization: Mixtures**

- **Description:** Mixture: consisting of the following components.

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· <b>Dangerous components:</b>		
CAS: 86290-81-5 EINECS: 289-220-8 Index number: 649-378-00-4	Naphtha (petrol) with a low boiling point ("Complex combination of hydrocarbons made up mainly of paraffin, cycloparaffin, aromatic and olefinic hydrocarbons, with a number of atoms of carbon, prevalently C3 - C12 and boiling point between 30°C and 260°C). ⚠ Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	50-100%
CAS: 108-20-3 EINECS: 203-560-6 Index number: 603-045-00-X RTECS: TZ 5425000	diisopropyl ether ⚠ Flam. Liq. 2, H225; ⚠ STOT SE 3, H336	10-25%

· SVHC -

### 4 First-aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **5.1 Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

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**7 Handling and storage**

- **7.1 Precautions for safe handling**  
Keep receptacles tightly sealed.  
Keep away from heat and direct sunlight.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.  
Keep respiratory protective device available.

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Do not gas tight seal receptacle.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**CAS: 86290-81-5 Naphtha (petrol) with a low boiling point ("Complex combination of hydrocarbons made up mainly of paraffin, cycloparaffin, aromatic and olefinic hydrocarbons, with a number of atoms of carbon, prevalently C3 - C12 and boiling point between 30°C and 260°C). (50-100%)**

REL	See Pocket Guide App. A
TLV	Short-term value: 1480 mg/m <sup>3</sup> , 500 ppm Long-term value: 890 mg/m <sup>3</sup> , 300 ppm bulk handling

**CAS: 108-20-3 diisopropyl ether (10-25%)**

PEL	Long-term value: 2100 mg/m <sup>3</sup> , 500 ppm
REL	Long-term value: 2100 mg/m <sup>3</sup> , 500 ppm
TLV	Short-term value: 1300 mg/m <sup>3</sup> , 310 ppm Long-term value: 1040 mg/m <sup>3</sup> , 250 ppm

**CAS: 64-17-5 ethanol (5-10%)**

PEL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
REL	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
TLV	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm

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**CAS: 123-91-1 1,4-dioxane (5-10%)**
**PEL** Long-term value: 360 mg/m<sup>3</sup>, 100 ppm  
 Skin

**REL** Ceiling limit value: 3.6\* mg/m<sup>3</sup>, 1\* ppm  
 \*30-min; See Pocket Guide App. A

**TLV** Long-term value: 72 mg/m<sup>3</sup>, 20 ppm  
 Skin

 · **Additional information:** The lists that were valid during the creation were used as basis.

 · **8.2 Exposure controls**

 · **Personal protective equipment:**

 · **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

 · **Breathing equipment:** Not required.

 · **Protection of hands:**


Protective gloves

 · **Material of gloves** Butyl rubber, BR

 · **Eye protection:**


Tightly sealed goggles

**9 Physical and chemical properties**

 · **9.1 Information on basic physical and chemical properties**

 · **General Information**

 · **Appearance:**
**Form:** Liquid

**Color:** According to product specification

 · **Odor:** Characteristic

 · **Odor threshold:** Not determined.

 · **pH-value:** Not determined.

 · **Change in condition**
**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Undetermined.

 · **Flash point:** -60 °C (-76 °F)

 · **Flammability (solid, gaseous):** Not applicable.

 · **Ignition temperature:** 220 °C (428 °F)

 · **Decomposition temperature:** Not determined.

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· <b>Auto igniting:</b>	<i>Product is not selfigniting.</i>
· <b>Danger of explosion:</b>	<i>May form explosive peroxides.</i>
· <b>Explosion limits:</b>	
<b>Lower:</b>	<i>1.0 Vol %</i>
<b>Upper:</b>	<i>21.0 Vol %</i>
· <b>Vapor pressure at 20 °C (68 °F):</b>	<i>532 hPa (399 mm Hg)</i>
· <b>Density at 15 °C (59 °F):</b>	<i>0.812 g/cm<sup>3</sup> (6.77614 lbs/gal)</i>
· <b>Relative density</b>	<i>Not determined.</i>
· <b>Vapor density</b>	<i>Not determined.</i>
· <b>Evaporation rate</b>	<i>Not determined.</i>
· <b>Solubility in / Miscibility with Water:</b>	<i>Not miscible or difficult to mix.</i>
· <b>Partition coefficient (n-octanol/water):</b>	<i>Not determined.</i>
· <b>Viscosity:</b>	
<b>Dynamic:</b>	<i>Not determined.</i>
<b>Kinematic:</b>	<i>Not determined.</i>
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	<i>85.0 %</i>
· <b>9.2 Other information</b>	<i>No further relevant information available.</i>

## 10 Stability and reactivity

- **10.1 Reactivity** *No further relevant information available.*
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used according to specifications.*
- **10.3 Possibility of hazardous reactions** *No dangerous reactions known.*
- **10.4 Conditions to avoid** *No further relevant information available.*
- **10.5 Incompatible materials:** *No further relevant information available.*
- **10.6 Hazardous decomposition products:** *No dangerous decomposition products known.*

## 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** *Based on available data, the classification criteria are not met.*

- **LD/LC50 values that are relevant for classification:**

**CAS: 86290-81-5 Naphtha (petrol) with a low boiling point ("Complex combination of hydrocarbons made up mainly of paraffin, cycloparaffin, aromatic and olefinic hydrocarbons, with a number of atoms of carbon, prevalently C3 - C12 and boiling point between 30°C and 260°C).**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5,610 mg/l (rat)

**CAS: 108-20-3 diisopropyl ether**

Oral	LD50	8,470 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

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Inhalative	LC50/4 h	162 mg/l (rat)
<b>CAS: 64-17-5 ethanol</b>		
Oral	LD50	7,060 mg/kg (rat)
Inhalative	LC50/4 h	20,000 mg/l (rat)
<b>CAS: 123-91-1 1,4-dioxane</b>		
Oral	LD50	5,700 mg/kg (mouse)
Dermal	LD50	7,600 mg/kg (rabbit)
Inhalative	LC50/4 h	46 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:**  
Causes skin irritation.
- **on the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

CAS: 108-88-3	toluene	3
CAS: 78-79-5	isoprene (stabilized)	2B
CAS: 64-17-5	ethanol	1
CAS: 123-91-1	1,4-dioxane	2B

- **NTP (National Toxicology Program)**

CAS: 78-79-5	isoprene (stabilized)	R
CAS: 123-91-1	1,4-dioxane	R

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

<b>CAS: 86290-81-5 Naphtha (petrol) with a low boiling point ("Complex combination of hydrocarbons made up mainly of paraffin, cycloparaffin, aromatic and olefinic hydrocarbons, with a number of atoms of carbon, prevalently C3 - C12 and boiling point between 30°C and 260°C).</b>	
LC50 48h	4.5 mg/l (daphnia)
LC50 96h	10 mg/l (fish)
EC50 72h	3.1 mg/l (plt)
<b>CAS: 64-17-5 ethanol</b>	
EC50 72h	275 mg/l (Algae)
EC50 48h	12,340 mg/l (daphnia)
EC50 96h	13,000 mg/l (fish)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish

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- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (Self-assessment): hazardous for water



Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### 13 Disposal considerations



- **13.1 Waste treatment methods**
- **Recommendation:**



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

· <b>14.1 UN-Number</b>	UN1203
· <b>ADR, IMDG, IATA</b>	
· <b>14.2 UN proper shipping name</b>	UN1203 MOTOR SPIRIT, ENVIRONMENTALLY HAZARDOUS
· <b>ADR</b>	MOTOR SPIRIT, MARINE POLLUTANT
· <b>IMDG</b>	MOTOR SPIRIT
· <b>IATA</b>	
· <b>14.3 Transport hazard class(es)</b>	3
· <b>Label</b>	
· <b>ADR</b>	
 	
· <b>Class</b>	3 (F1) Flammable liquids
· <b>Label</b>	3

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· **IMDG**

· **Class** 3 Flammable liquids  
 · **Label** 3

· **IATA**

· **Class** 3 Flammable liquids  
 · **Label** 3

· **14.4 Packing group**

· **ADR, IMDG, IATA** II

· **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: Naphtha (petrol) with a low boiling point ("Complex combination of hydrocarbons made up mainly of paraffin, cycloparaffin, aromatic and olefinic hydrocarbons, with a number of atoms of carbon, prevalently C3 - C12 and boiling point between 30°C and 260°C).

· **Marine pollutant:**

Yes (DOT)  
 Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Flammable liquids

· **Danger code (Kemler):**

33

· **EMS Number:**

F-E,S-E

· **Stowage Category**

E

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **Quantity limitations**

On passenger aircraft/rail: 5 L  
 On cargo aircraft only: 60 L

· **Remarks:**

Special marking with the symbol (fish and tree).

· **ADR**· **Excepted quantities (EQ)**

Code: E2  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 500 ml

· **IMDG**· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E2  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1203 MOTOR SPIRIT, 3, II, ENVIRONMENTALLY HAZARDOUS

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### 15 Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

CAS: 108-88-3 toluene

CAS: 78-79-5 isoprene (stabilized)

CAS: 123-91-1 1,4-dioxane

· **TSCA (Toxic Substances Control Act):**

CAS: 108-88-3 toluene

CAS: 108-20-3 diisopropyl ether

CAS: 78-79-5 isoprene (stabilized)

CAS: 64-17-5 ethanol

CAS: 123-91-1 1,4-dioxane

· **Proposition 65**

· **Chemicals known to cause cancer:**

CAS: 78-79-5 isoprene (stabilized)

CAS: 123-91-1 1,4-dioxane

· **Chemicals known to cause reproductive toxicity for females:**

CAS: 108-88-3 toluene

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

CAS: 108-88-3 toluene

CAS: 64-17-5 ethanol

· **Carcerogenity categories**

· **EPA (Environmental Protection Agency)**

CAS: 108-88-3 toluene

II

CAS: 123-91-1 1,4-dioxane

L

· **TLV (Threshold Limit Value established by ACGIH)**

CAS: 108-88-3 toluene

A4

CAS: 64-17-5 ethanol

A3

CAS: 123-91-1 1,4-dioxane

A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

CAS: 123-91-1 1,4-dioxane

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

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**16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Date of preparation / last revision** 07/05/2019 / -

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*GHS: Globally Harmonised System of Classification and Labelling of Chemicals*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*SVHC: Substances of Very High Concern*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Flam. Liq. 1: Flammable liquids – Category 1*

*Flam. Liq. 2: Flammable liquids – Category 2*

*Skin Irrit. 2: Skin corrosion/irritation – Category 2*

*Muta. 1B: Germ cell mutagenicity – Category 1B*

*Muta. 2: Germ cell mutagenicity – Category 2*

*Carc. 1B: Carcinogenicity – Category 1B*

*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

*STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

*Asp. Tox. 1: Aspiration hazard – Category 1*