

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/02/2019

Reviewed on 08/02/2019

1 Identification

- **1.1 Product identifier**
- **Trade name:** **Z85 PERFO**
- **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. 1A H350 May cause cancer.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.
 STOT SE 3 H335 May cause respiratory irritation.

- **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:**
 ethanol

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).
 1,4-dioxane

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· **Hazard statements**

H224 *Extremely flammable liquid and vapor.*

H319 *Causes serious eye irritation.*

H341 *Suspected of causing genetic defects.*

H350 *May cause cancer.*

H335 *May cause respiratory irritation.*

· **Precautionary statements**

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

P233 *Keep container tightly closed.*

P264 *Wash thoroughly after handling.*

P273 *Avoid release to the environment.*

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

P280 *Wear eye protection / face protection.*

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.*

P305+P351+P338 *If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

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)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = *2
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.

· **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 RTECS: KQ 6300000	ethanol ⚠ Flam. Liq. 2, H225; ⚠ Carc. 1A, H350; ⚠ Eye Irrit. 2A, H319 Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 %	0-100%
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. 2, H341; Carc. 1B, H350; STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	0-25%

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CAS: 123-91-1 EINECS: 204-661-8 Index number: 603-024-00-5 RTECS: JG 8225000 · SVHC -	<div style="text-align: right;">(Contd. of page 2)</div> 1,4-dioxane ⚠ Flam. Liq. 2, H225; ⚠ Carc. 2, H351; ⚠ Eye Irrit. 2A, H319; STOT SE 3, H335	0-25%
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4 First-aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **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:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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** Not required.
- **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).
- **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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

CAS: 64-17-5	ethanol	1,800 ppm
CAS: 123-91-1	1,4-dioxane	17 ppm
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).	200 ppm

- **PAC-2:**

CAS: 64-17-5	ethanol	3300* ppm
CAS: 123-91-1	1,4-dioxane	320 ppm
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).	1,000 ppm

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· PAC-3:		
CAS: 64-17-5	ethanol	15000* ppm
CAS: 123-91-1	1,4-dioxane	760 ppm
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).	4000* ppm

7 Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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: 64-17-5 ethanol (25-50%)	
PEL	Long-term value: 1900 mg/m ³ , 1000 ppm
REL	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV	Short-term value: 1880 mg/m ³ , 1000 ppm
CAS: 123-91-1 1,4-dioxane (10-25%)	
PEL	Long-term value: 360 mg/m ³ , 100 ppm Skin
REL	Ceiling limit value: 3.6* mg/m ³ , 1* ppm *30-min; See Pocket Guide App. A
TLV	Long-term value: 72 mg/m ³ , 20 ppm Skin
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). (10-25%)	
REL	See Pocket Guide App. A
TLV	Short-term value: 1480 mg/m ³ , 500 ppm Long-term value: 890 mg/m ³ , 300 ppm bulk handling

- **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:** Wash hands before breaks and at the end of work.

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· Breathing equipment:


In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:


Protective gloves

· Material of gloves Nitrile rubber, NBR

· Eye protection:


Safety glasses

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: 34.3 °C (93.7 °F)

· Flash point: -20 °C (-4 °F)

· Flammability (solid, gaseous): Not applicable.

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

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits:

Lower: 1 Vol %
Upper: 22.5 Vol %

· Vapor pressure at 20 °C (68 °F): 532 hPa (399 mm Hg)

· Density: Not determined.

· Relative density Not determined.

· Vapor density Not determined.

· Evaporation rate Not determined.

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- | | |
|---|--|
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 0-100 % |
| · 9.2 Other information | No further relevant information available. |

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: 64-17-5 ethanol

Oral	LD50	7,060 mg/kg (rat)
Inhalative	LC50/4 h	20,000 mg/l (rat)

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

Oral	LD50	5,700 mg/kg (mouse)
Dermal	LD50	7,600 mg/kg (rabbit)
Inhalative	LC50/4 h	46 mg/l (rat)

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)

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

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- **Additional toxicological information:**

- **Carcinogenic categories**

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

CAS: 64-17-5	ethanol	1
CAS: 123-91-1	1,4-dioxane	2B
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).	2B

- **NTP (National Toxicology Program)**

CAS: 123-91-1	1,4-dioxane	R
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- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

CAS: 64-17-5 ethanol

EC50 72h 275 mg/l (Algae)

EC50 48h 12,340 mg/l (daphnia)

EC50 96h 13,000 mg/l (fish)

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).

LC50 48h 4.5 mg/l (daphnia)

LC50 96h 10 mg/l (fish)

EC50 72h 3.1 mg/l (plt)

- **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

- **Additional ecological information:**

- **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely 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.

US

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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

· 14.1 UN-Number

· ADR, IMDG, IATA

UN1203

· 14.2 UN proper shipping name

· ADR

UN1203 MOTOR SPIRIT solution, ENVIRONMENTALLY HAZARDOUS

· IMDG

MOTOR SPIRIT solution, MARINE POLLUTANT

· IATA

MOTOR SPIRIT solution

· 14.3 Transport hazard class(es)

· Label

3

· ADR



· Class

3 (F1) Flammable liquids

· Label

3

· 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,

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·	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)
· Special marking (ADR):	Symbol (fish and tree) 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)	1L
· 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 SOLUTION, 3, II, ENVIRONMENTALLY HAZARDOUS

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

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

CAS: 64-17-5 | ethanol | ACTIVE

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

· **Hazardous Air Pollutants**

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

· **Proposition 65**

· **Chemicals known to cause cancer:**

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

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

None of the ingredients is listed.

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· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

CAS: 64-17-5 | ethanol

· Cancerogenity categories
· EPA (Environmental Protection Agency)

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

L

· TLV (Threshold Limit Value established by ACGIH)

All components have the value A3.

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

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

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).

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

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 08/02/2019 / -

· 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

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1A: Carcinogenicity – Category 1A

Carc. 1B: Carcinogenicity – Category 1B

Carc. 2: Carcinogenicity – Category 2

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