

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 24.10.2014

Version number 1

Revision: 24.10.2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: IRF 102**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation :** Racing fuel
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Expertises Technologies & Services Produits - ETSP
Zone d'Activités de la Baudrière n°1
27520 BOURGTHEROULDE - INFREVILLE FRANCE
Tel : +33(0)2 32 13 14 50
Fax : +33(0)2 32 13 14 51
Pour toute information, nous contacter : msds@ets-p.com
- **1.4 Emergency telephone number:**
France (ORFILA 24h/24) - Tel : +33 (0)1 45 42 59 59
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)
EU Tel : 112

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008 :**



GHS02

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08

Muta. 1B H340 May cause genetic defects.
 Carc. 1B H350 May cause cancer.
 Repr. 2 H361d Suspected of damaging the unborn child.
 Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS09

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
 STOT SE 3 H336 May cause drowsiness or dizziness.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC :**



T; Toxic

R45-46: May cause cancer. May cause heritable genetic damage.



Xn; Harmful

R62-63-65: Possible risk of impaired fertility. Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed.

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**Xi; Irritant**

R38: Irritating to skin.

**F+; Extremely flammable**

R12: Extremely flammable.

**N; Dangerous for the environment**

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

R67: Vapours may cause drowsiness and dizziness.

· **Information concerning particular hazards for human and environment:**

The product has to be labelled in the latest valid version according to the calculation procedure of the "General Classification guideline for preparations of the EU".

Has a narcotising effect.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02



GHS07



GHS08



GHS09

· **Signal word Danger**

· **Hazard-determining components of labelling:**

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).

· **Hazard statements**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H361d Suspected of damaging the unborn child.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P243 Take precautionary measures against static discharge.

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

P273 Avoid release to the environment.

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

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P264 Wash hands thoroughly after handling.

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

P202 Do not handle until all safety precautions have been read and understood.

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- P301+P310 **IF SWALLOWED:** Immediately call a POISON CENTER/ doctor.
- 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.
- P321 Specific treatment (see on this label).
- P331 Do NOT induce vomiting.
- P391 Collect spillage.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Restricted to professional users.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.














· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

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

· **Dangerous components:**

CAS: 86290-81-5 EINECS: 289-220-8 Index number: 649-378-00-4 Reg.nr.: 01-2119471335-39-0007	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).  T Carc. Cat. 1, Muta. Cat. 1 R45-46;  Xn R62-63-65;  Xi R38;  F+ R12;  N R51/53 R67 -----  Flam. Liq. 1, H224;  Muta. 1B, H340; Carc. 1B, H350; Repr. 2, H361d; Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  Skin Irrit. 2, H315; STOT SE 3, H336	50-100%
CAS: 637-92-3 Reg.nr.: 01-2119452785-29	tert butyl ethyl ether  Xi R38;  F R11 -----  Flam. Liq. 1, H224;  Skin Irrit. 2, H315	10-25%

· **Additional information:** For the wording of the listed risk phrases, refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **After excessive inhalation:**

In case of unconsciousness place patient in a stable laying down 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:** If symptoms persist consult a doctor.

· **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.

SECTION 5: Firefighting measures

· **5.1 Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

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- **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.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures :**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
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 protective equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling :**
Keep receptacles tightly sealed.
Keep away from heat and direct sunlight.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**



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 container tightly sealed.
Do not seal receptacle gas tight.
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.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see section 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any significant quantities of materials with critical values that have to be monitored at the workplace.

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· **Additional information:**

As a basis for the production of this document, the most current valid lists were used.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from food, beverages and petfood.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid all contact with the skin.

Avoid contact with the eyes and skin.

· **Respiratory protection:** *Not required.*

· **Protection of hands:**



Protective gloves

· **Gloves material :**

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which may vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked before use.

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: *Liquid*

Colour: *Colourless*

· **Odour:** *Characteristic*

· **Odour threshold:** *Not determined.*

· **pH-value:** *Not determined.*

· **Change in condition**

Melting point/Melting range: *<-30 °C*

Boiling point/Boiling range: *36.1-140.3 °C (760 mmHg)*

· **Flash point:** *<-30 °C*

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

· **Ignition temperature:** *300 °C*

· **Decomposition temperature:** *Not determined.*

· **Self-igniting:** *Product is not self igniting.*

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

· **Explosion limits:**

Lower: *1.4 Vol %*

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Upper:	7.6 Vol %
· Vapour pressure at 37.8 °C:	59.3 kPa
· Density at 15 °C:	0.7455 g/cm ³
· Relative density :	Not determined.
· Vapour density :	Not determined.
· Evaporation rate :	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Segregation coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic at 20 °C:	0.75 cst
Kinematic:	Not determined.
· 9.2 Other information :	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **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.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity:**

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

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	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5610 mg/l (rat)

- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eyes:** No irritant effect.
- **Sensitisation:** No sensitising effects known.
- **Additional toxicological information:**
The product shows the following hazards according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
Carcinogenic.
The product can cause inheritable damage.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Muta. 1B, Carc. 1B, Repr. 2

GB

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SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

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).

EC50 72h	3.1 mg/l (plt)
LC50 48h	4.5 mg/l (daphnia)
LC50 96h	10 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

· **Additional ecological information:**

· **General notes:**

Water hazard class 3 (German Regulation) (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.

SECTION 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 packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number

· **ADR, IMDG, IATA**

UN1203

· 14.2 UN proper shipping name

· **ADR**

1203 MOTOR SPIRIT, ENVIRONMENTALLY HAZARDOUS

· **IMDG**

MOTOR SPIRIT, MARINE POLLUTANT

· **IATA**

MOTOR SPIRIT

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· **14.3 Transport hazard class(es)**· **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, 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
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

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

Not applicable.

· **Transport/Additional information:**· **ADR**· **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

· **Transport category**

2

· **Tunnel restriction code**

D/E

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

1L

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· Exempted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN1203, MOTOR SPIRIT, ENVIRONMENTALLY HAZARDOUS, 3, II

SECTION 15: Regulatory information

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

SECTION 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.

- **Relevant phrases**
 - H224 Extremely flammable liquid and vapour.
 - H304 May be fatal if swallowed and enters airways.
 - H315 Causes skin irritation.
 - H336 May cause drowsiness or dizziness.
 - H340 May cause genetic defects.
 - H350 May cause cancer.
 - H361d Suspected of damaging the unborn child.
 - H411 Toxic to aquatic life with long lasting effects.
- **Relevant hazard statements**
 - R11 Highly flammable.
 - R12 Extremely flammable.
 - R38 Irritating to skin.
 - R45 May cause cancer.
 - R46 May cause heritable genetic damage.
 - R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R62 Possible risk of impaired fertility.
 - R63 Possible risk of harm to the unborn child.
 - R65 Harmful: may cause lung damage if swallowed.
 - R67 Vapours may cause drowsiness and dizziness.
- **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
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - 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)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - Flam. Liq. 1: Flammable liquids, Hazard Category 1
 - Flam. Liq. 2: Flammable liquids, Hazard Category 2
 - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 - Muta. 1B: Germ cell mutagenicity, Hazard Category 1B
 - Carc. 1B: Carcinogenicity, Hazard Category 1B
 - Repr. 2: Reproductive toxicity, Hazard Category 2
 - STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
 - Asp. Tox. 1: Aspiration hazard, Hazard Category 1
 - Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2