

Product	FCC GASOLINE EXPORT	Date:	2/06/2009
		Edition:	1/06/09

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

- **Trade name:** FCC GASOLINE – EXPORT **CAS: 86290-81-5**
- **Chemical name:** Complex mixture of aromatic and non-aromatic hydrocarbons with domination of hydrocarbons in areas C4 to C12, produced by separation and conversion refining processes.
- **Product code:** 1000330
- **Registration number:**
- **Product use:** As a component for blending of motor gasoline.
- **Producer/supplier:** **INA-INDUSTRIJA NAFTE d.d.**
- Address:** Av. Većeslava Holjevca 10, P.O.B. 555, 10002 Zagreb, CROATIA
- Phone** 00-385-1-6450-842 / 00-385-1-6451-075 (0-24 h)
- Fax** 00-385-1-6452-050 **e-mail:** sds@ina.hr
- **Responsible person:** **Organisational Design and Process Management Sector**
Hrvoje Raukar, B.Sc. Tel. 00-385-1-6450-602
Tatjana Benko, B.Sc.
- **Emergency Service Telephone Number:** **112**
- National Protection and Rescue Directorate** 00-385-1-3650-011
Nehajska 5, 10000 Zagreb 00-385-1-3650-084
e-mail: info@duzs.hr 00-485-1-3650-082
00-485-1-3650-083
- **Medical Information Telephone Number:** **00-385-01-23-48-342**

2. HAZARDS IDENTIFICATION

- **Classification of substances/preparations (per hazard):**
- **The most important hazards and effects:**
- Human health hazards: Harmful for health. May cause cancer.
Longer exposure is hazardous, because of possibly causing major health impairment through skin, inhalation, or ingestion. If ingested, may cause damage to lungs.
Vapours may cause sleepiness or dizziness.
- Environmental hazards: Toxic for aquatic organisms. May have long-term harmful effect in water.
- Physical and chemical hazards: Very easily flammable. Its use may create explosive or flammable vapour-air mixture.
- **Special hazards:** See item 10.
- **Main symptoms of effects:**
- Inhalation: Dizziness and sleepiness.
- Skin: Dry and cracked skin.
- Eyes: Possible redness and prickling in sensitive persons.

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Ingestion: Nausea, vomiting, cough, breathing difficulties, and if aspired, may cause pulmonary oedema.

- **Overview of special conditions:** No special recommendations or measures.

3. COMPOSITION / INFORMATION ON INGREDIENTS

- **Substance:** **Preparation:**

- **Components contributing to product hazardousness:**

Name of the substance	Concentration [%]	EINECS number	CAS number	Hazard symbol	Risk phrase	Registration number
FCC gasoline	≤100	289-220-8	86290-81-5	T	45-46-65	
Benzene*	≤1	200-753-7	71-43-2	F, T	11-36/38-45-46-48/23/24/25-65	-

*This ingredient is not added intentionally.

4. FIRST-AID MEASURES

- **General information:**

- **First-aid procedures:**

after inhalation: Remove the person from contaminated area to fresh air. In case of major harmful symptoms, seek medical assistance.

after skin contact: Remove soaked clothes and shoes and flush the contact points thoroughly with water and soap for at least 15 to 20 minutes.

after eye contact: Hold eyelids apart with clean hands and flush the eyes with running water and soap for at least 15 to 20 minutes. In case of intense redness, irritation or tearing, seek ophthalmologist's assistance.

after ingestion: Do not induce vomiting! Flush the mouth out with water. Place the afflicted person in a half-lying position and transport to hospital.

- **Note to first-aid/physician:** See items 2 and 3.

5. FIRE-FIGHTING MEASURES

- **Extinguishing media:**

SUITABLE: Foam, powder, CO₂ (for closed rooms/areas).

NOT SUITABLE: Water jet, except water mist for cooling closed storage tanks.

- **Fire-fighting measures for special hazards:** Eliminate all sources of ignition; call the fire brigade and the police. Especially bear in mind that there is a permanent hazard of forming explosive mixture with air at room temperature.

- **Special fire-fighting measures:** Use of water mist and water spray for cooling surfaces exposed to heat and for protection of persons. Only personnel trained in fire-fighting may use water spray (dispersed water).

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- **Fire-fighting special safety equipment:** Self-contained open-circuit compressed-air breathing apparatus (HRN EN 137/AC), heat irradiation kit.
- **Special exposure hazards:** Vapours are heavier than air and may accumulate at ground level and in dents.
- **Other information:**

6. ACCIDENTAL RELEASE MEASURES

- **Personal precautions:** Use personal protective equipment from item 8.
- **Environmental precautions:** Prevent leaking and spilling into the soil, sewerage, as well as surface water and drainage systems by placing barriers and partitions. Reloading into undamaged tanks to be performed taking all safety measures against static electricity.
- **Methods for cleaning-up and recovery:** Pump the product from damaged tank into empty tank with the pump designed for use in potentially explosive atmosphere. Remove the remainders with adsorbents (sawdust, sand). Store waste material and removed contaminated surface soil layer in sealed containers in well-ventilated premises. Hand over for disposal to legal entities for hazardous waste disposal, authorised by the Ministry in charge of environmental protection.
- **Additional warnings:** In case of major leaks/spills, notify Emergency Service by dialling 112.

7. HANDLING AND STORAGE

- Handling:

Safety precautions

Keep away from heat sources and eliminate all ignition sources. Perform reloading i.e. loading/unloading only at the locations properly designed for the purpose, ensuring sufficient air ventilation/exhaustion. Use only fully operational equipment and devices. Do not use sparking tools.

Make sure that the floor in the work premises and storage area is impermeable and resistant to solvents. Floors in the areas at risk of explosive atmosphere in the static electricity conductor system should have transfer resistance of <1 MΩ.

Ground the devices and take safety precautions against static electricity.

Safe handling advice

Smoking, eating, drinking or storing food is prohibited in the room where this product is handled. Keep personal clothes separate from work clothes and workplace. Wearing of prescribed work clothes, protective gloves and goggles is obligatory.

- **Storage:** technical measures and storage conditions:

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SUITABLE: Store in well-closed, properly designed and equipped tanks making sure that the room/area is well-ventilated and kept at appropriate temperature. Take precautions against electrostatic charge.

Make sure that containing dike-enclosed areas are provided below self-supporting tanks.

TO BE AVOIDED: Storage areas containing other chemicals, especially flammable ones. Use of sparking tools or devices.

- Packaging materials:

RECOMMENDED: Original packaging made by the product producer.

NOT SUITABLE: All other.

- Special use:

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure limit values

Hazardous substance	Limit values for exposure (Croatia) ppm	Biological limit values
Gasoline	100	No data
Benzene	1	0.12 ppm (in the last exhaled breath – smoking increases the result)

- Monitoring procedures

8.2 Exposure controls

- Summary of risk management measures:

8.2.1 Occupational exposure controls

- Description of operating procedure and technological control:

Provide good ventilation / air outlet in work premises.

- Personal protective equipment:

Respiratory tract protection In case of accidents when vapour concentration exceeds the allowed maximum, wear protective mask (HRN EN 136) with filter A (HRN EN 141), while if oxygen concentration drops below 17%, use the self-contained open-circuit compressed-air breathing apparatus (HRN EN 137).

Hand protection Wear protective gloves made of stable and impermeable material. In case of full contact wear gloves made of nitrile rubber, 0.40 thick; in contact with drops wear gloves made of nitrile rubber, 0.11 thick (HRN EN 374). In case of shorter contact (4 hrs), PVA (polyvinyl alcohol) gloves are allowed.

Eye protection Wear protective goggles in case of spraying.

Skin and body protection Protective clothing and footwear.

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- Special hygienic and safety precautions: During handling this product, smoking/eating/drinking is prohibited- After each interruption of work, washing hands is obligatory.

8.2.2 Environmental exposure control

- Summary of risk management measures

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information:

- State: Liquid
- Colour: Colourless
- Odour: Characteristic for gasoline

9.2. Important health, safety and environmental information:

- pH value (indicate conc. and temp.): Not applicable
- Boiling point/Boiling range: °C 28 - 215
- Flash point: °C No data
- Flammability (solid, gas): >250
- Explosive properties: vol. % 1 – 8
- Oxidizing properties: Not applicable
- Vapour pressure: Pa 0.65 – 0.90
- Density at 15 °C: kg/m³ 725 - 750
- Solubility (indicate solvent): g/L No data
- Solubility in water: g/L Not applicable
- Partition coefficient n-octanol / water logPow 2 - 7
- Viscosity at 37,8 °C: mm²/s <1
- Vapour density: kg/m³ No data
- Volatility: No data

9.3. Other data:

- Melting point/Melting range: °C No data
- Disintegration temperature: °C No data
- Auto-ignition temperature: °C No data
- Conductivity: No data
- Miscibility: No data

10. STABILITY AND REACTIVITY

- **Stability:** Stable in case of meeting the prescribed storage and use requirements.
- **Conditions to avoid:** Heat sources, flame, spark.
- **Materials to avoid:** Halogens, strong acids, lye, and strong oxidants.
- **Hazardous decomposition products:**

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- Special hazards

11. TOXICOLOGICAL INFORMATION

- Acute toxicity:

Oral (LD ₅₀)	>5000 mg/kg (rat)
Inhalation (LC ₅₀)	>5.2 mg/L (4 hrs, rat)
Dermal (LD ₅₀)	>2000 mg/kg (rat)

- Local effects:

Skin irritation	No data
Eye irritation	No data
Skin sensitization	No data
Inhalation sensitization	No data

- Chronic poisoning or long exposure:

May have irritating effect on skin, and/or eyes, particularly in sensitive persons. Due to irritating effect, may cause dermatitis and/or long-term redness.

- Exposure effects

Single-term:	Depression of central nervous system and/or dizziness, sleepiness, headache, nausea, vomiting.
Recurrent:	Depression of central nervous system.
Long-term:	Serious damages to central nervous system.

- Momentary effects:

No data.

- Delayed effects:

No data.

- Special effects

(carcinogenicity, mutagenicity and toxicity for reproduction):

Product assessed as carcinogenic (cat.1) and mutagenic (cat. 2), due to the presence of benzene.

12. ECOLOGICAL INFORMATION

- Mobility:

Known or predicted distribution to environmental compartments	Insoluble in water. Floats on water surface.
Surface tension	No data
Soil absorption/desorption	No data
Other physical and chemical properties	See item 9.

- Persistence/degradability:

Biotic or abiotic degradation	Majority of product ingredients is potentially biodegradable.
Aerobic or anaerobic degradation	No data
Persistence	No data

- Bio-accumulation:

bio-concentration factor (BCF)	No data
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- Results of PBT assessment:

- Product effect on the environment:

Water Pollutes watercourses and may have long-term harmful effect.

Air No data.

Soil Pollutes watercourses and may have long-term harmful effect.

- Eco-toxicity:

For aquatic organisms (LD₅₀)

For algae (*Selenastrum caprocormutum*) 1 mg/L/72 hrs

For ground organisms (LD₅₀)

No data

For plants and land animals (LD₅₀)

No data

- Other harmful effects:

13. DISPOSAL CONSIDERATIONS

- Preferred disposal considerations:

Waste from residues: Product has no classic waste, except in case of accidental discharging/leaking/spilling. In that case see item 6. Thermal treatment of polluted residues is foreseen.

Contaminated packaging: To be washed, while washing remainder shall be taken care of by an authorised institution.

Local applicable regulations: Law on Waste (OG 178/04, OG 153/05, OG 111/06, and 60/08); Decree on Waste Categories, Types, and Classification, with Hazardous Waste List (OG 50/05, OG 39/09); Regulations on Waste Management Conditions (OG 123/97, OG 112/01); Decree on Hazardous Waste Management Conditions (OG 32/98).

Obligatory compliance with the EU, national, and/or local laws and regulations. User shall be responsible for knowledge of all relevant national and local regulations.

14. TRANSPORT INFORMATION

- Transport classification signs:

- Name of hazardous chemical according to international contracts on transport of hazardous substances:

Motor gasoline.

Road/Rail transport (ADR / RID):

UN number: 1203 class: 3 packaging group: II

Inland Waterway (ADNR):

UN number: 1203 class: 3 packaging group: II

Sea transport (IMDG): S. 3141

UN number: 1203 class: 3 packaging group: II

Air transport (ICAO/IATA):

UN number: 1203 class: 3 packaging group:

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- Additional regulations:** Hazardous Substances Transportation Law (OG 79/07); European Agreement on Hazardous Substances International Road Transportation (ADR – Appendices A and B) (OG ID 11/08); Regulations on the Manner of Hazardous Substances Road Transportation (OG 53/06); Regulations on Hazardous Substances Handling, Conditions and Manner of Maritime Transportation, Loading and Unloading, Bulk and Other Cargo in Ports, and Way of Preventing Spreading of Spilled Oils in Ports (OG 51/05).
- Special precautions and transport conditions:** Fire risk 3.

15. REGULATORY INFORMATION

- Chemical Safety Assessment carried out (CSA):	YES		NO	
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Data on hazards and safety measures (according to label):

Level of substance utility is encompassed by limitation (limitations) in accordance with relevant explanation (explanations) for Chapter (5) of Amendment XVII to Regulation (EC) No. 1907/2006 of the European Parliament and Council.

Packaging of such substances and preparations must have a legible and indelible label stating:

“For professional use only”

Danger symbol



Toxic

Risk phrases

- R: 45 May cause cancer.
 46 May cause heritable genetic damage.
 65 Harmful: may cause lung damage if swallowed.

Safety phrases

- S: 53 Avoid exposure - obtain special instructions before use.
 45 In case of accident or if you feel unwell, seek medical advice immediately (*show the label where possible*).

- Applicable provisions, regulations and directives:

Law on Chemicals (OG 150/05, OG 53/08); Regulations on Classification, Designation, Labelling, and Packing of Hazardous Substances (OG 23/08); Regulations on Limit Values of Exposure to Hazardous Substances at Work and on Biological Limit Values (OG 13/09); Regulations on Filling-out the Safety Data Sheet (OG 39/09).

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16. OTHER INFORMATION

Risk phrases (for ingredients)	R 11	Highly flammable.
	R 36/38	Irritating to eyes and skin.
	R 48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

Safety phrases (for ingredients)**Statement:**

This SDS is in compliance with Croatian legislation. Users are responsible for adherence to local laws and regulations. SDS contains information important for users' health and safety, as well as environmental protection. Data contained in this document correspond to our knowledge acquired on the product so far. The product should not be used for the purposes other than those mentioned in instructions. In case of mixing with other products, existence of additional risks/hazards should be checked. We shall assume no responsibility for any failure to meet the requirements of this SDS.

Dana sources:

1. <http://www.concawe.com>
2. <http://ecb.jrc.it/esis>
3. <http://www.omv.com>

Revision indicators:

Section: **Subject of change:**

**APPENDIX:
EXPOSURE SCENARIOS ACCORDING TO CHEMICAL SAFETY REPORT**
