# SAFETY DATA SHEET

(SOLAS regulation VI/5-1 format)





# Section 1. Identification

**Product name** : GASOLINE

see Section 16 for Synonyms

**Product description** petroleum hydrocarbons

Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : Petrol

Uses advised against : This product is not recommended for any industrial, professional or consumer use

other than the Identified Uses above.

**MARPOL Annex I Category** : Gasoline and spirits

See Section 14 for transportation information related to the Bill of Lading, other shipping documents

Supplier : ExxonMobil Marine Fuels

**ERMYN HOUSE** 

MAILPOINT 31, ERMYN WAY

LEATHERHEAD KT22 8UX United Kingdom

**Supplier General Contact** : (+44) (0) 23 8089 1558

E-Mail : MarineFuels@contactexxonmobil.com

**Local Emergency telephone** 

number

: Belgium: +(32)-28083237 (CHEMTREC)

China: 400 120 4937

France: +(33)-975181407 (CHEMTREC)

Germany: 0800 181 7059 or +(49)-69643508409 (CHEMTREC)

India: 000-800-100-7141

Italy: 0800 789767 (in country) or +(39)-0245557031 (CHEMTREC)

Japan: 0800-300-5842 Malaysia: +60 3-9212 5794

Netherlands: +(31)-858880596 (CHEMTREC)

Republic of Korea: 080-880-0454

Singapore: 800-101-2201

Spain: 900 868538 or +(34)-931768545 (CHEMTREC)

Thailand: 1800014808

United Kingdom: +44 20 3807 3798

United States: (800) 424-9300 or (703) 527-3887 (CHEMTREC)

This (M)SDS is a generic document with no country specific information included.

# Section 2. Hazard identification

This material is hazardous according to UN GHS Criteria. Classification includes all GHS hazard classes. For hazard categories with two cut-off/concentration limits, classification was based on the higher limit.

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 1

SKIN CORROSION/IRRITATION - Category 2 GERM CELL MUTAGENICITY - Category 1B

CARCINOGENICITY - Category 1B REPRODUCTIVE TOXICITY - Category 2

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) -

Category 3

ASPIRATION HAZARD - Category 1

SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

# **GHS label elements**

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2024

# Section 2. Hazard identification

# **Hazard pictograms**









## Signal word

: Danger

#### **Hazard statements**

: 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.

H361 - Suspected of damaging fertility or the unborn child.

H411 - Toxic to aquatic life with long lasting effects.

# **Precautionary statements**

### **General**

: P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

#### **Prevention**

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

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

P240 - Ground and bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilating or lighting equipment.

P242 - Use non-sparking tools.

P243 - Take action to prevent static discharges.

P261 - Avoid breathing vapour.

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,

or hearing protection.

### Response

: P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

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 or shower.

P304 + P312, P340 - IF INHALED: Call a POISON CENTER or doctor if you feel

unwell. Remove person to fresh air and keep comfortable for breathing. P308 + P313 - IF exposed or concerned: Get medical advice or attention.

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

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P370 + P378 - In case of fire: Use water fog, foam, dry chemical or carbon dioxide

(CO2) to extinguish flames.

P391 - Collect spillage.

### **Storage**

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

P403 + P235 - Keep cool. P405 - Store locked up.

### **Disposal**

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

### **Contains**

: naphtha (petroleum), light catalytic cracked; naphtha (petroleum), light steamcracked, de-benzenised; naphtha (petroleum), catalytic reformed; naphtha (petroleum), isomerisation; naphtha (petroleum), full-range alkylate; naphtha (petroleum), hydrotreated light; gasoline; naphtha (petroleum), hydrotreated heavy; naphtha (petroleum), unsweetened; naphtha (petroleum), full-range straight-run; nhexane; naphtha (petroleum), solvent-refined light; aromatic hydrocarbons, c7-12, c8-rich; naphtha (petroleum), light catalytic reformed; toluene and benzene

# Other hazards which do not : None known. result in classification

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# Section 2. Hazard identification

Nota

This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture

| Ingredient name   | % by weight | CAS number  |
|---|-------------|-------------|
| naphtha (petroleum), light catalytic cracked            | ≤70         | 64741-55-5  |
| naphtha (petroleum), light steam-cracked, de-benzenised | <10         | 68527-26-4  |
| naphtha (petroleum), catalytic reformed                 | ≤45         | 68955-35-1  |
| naphtha (petroleum), isomerisation                      | ≤10         | 64741-70-4  |
| naphtha (petroleum), full-range alkylate                | ≤35         | 64741-64-6  |
| naphtha (petroleum), hydrotreated light                 | ≤20         | 64742-49-0  |
| butane  | ≤20         | 106-97-8    |
| naphtha (petroleum), full-range alkylate, butane-contg. | ≤20         | 68527-27-5  |
| ethylbenzene  | ≥0.1 - ≤15  | 100-41-4    |
| cumene  | ≥0.1 - ≤15  | 98-82-8     |
| gasoline  | ≤10         | 86290-81-5  |
| naphtha (petroleum), hydrotreated heavy                 | ≤10         | 64742-48-9  |
| naphtha (petroleum), unsweetened                        | ≤10         | 68783-12-0  |
| naphtha (petroleum), full-range straight-run            | ≤10         | 64741-42-0  |
| p-xylene  | <10         | 106-42-3    |
| naphthalene   | <10         | 91-20-3     |
| xylene  | <10         | 1330-20-7   |
| n-hexane  | >3          | 110-54-3    |
| naphtha (petroleum), solvent-refined light              | <10         | 64741-84-0  |
| aromatic hydrocarbons, c7-12, c8-rich                   | ≤10         | 93571-75-6  |
| naphtha (petroleum), light catalytic reformed           | ≤10         | 64741-63-5  |
| alkenes, c6-10, hydroformylation products, low-boiling  | ≤10         | Proprietary |
| toluene   | >3          | 108-88-3    |
| hexane (mixtures of isomers)                            | ≤3          | Proprietary |
| benzene   | ≥0.1 - ≤1   | 71-43-2     |

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.

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

Nota:

# Section 4. First-aid measures

## **Description of necessary first aid measures**

### **Eye contact**

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

#### Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury. Wash clothing before reuse. Clean shoes thoroughly before reuse. Continue to rinse for at least 10 minutes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Get medical attention.

# Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

# Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact : Causes skin irritation.

**Ingestion** : Can cause central nervous system (CNS) depression. May be fatal if swallowed

and enters airways.

### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Numbness, muscle cramps, weakness and paralysis that may be delayed.

**Skin contact**: Adverse symptoms may include the following:

irritation redness

Local necrosis as evidenced by delayed onset of pain and tissue damage a few hours after injection.

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# Section 4. First-aid measures

Ingestion

: Adverse symptoms may include the following: nausea or vomiting

# Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. This material, or a component, may be associated with cardiac sensitization following very high exposures (well above occupational exposure limits) or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine. Administration of such substances should be avoided.

Specific treatments
Protection of first-aiders

: No specific treatment.

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

# Section 6. Accidental release measures

## **NOTIFICATION PROCEDURES**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

# Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: 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. Put on appropriate personal protective equipment. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and material for containment and cleaning up

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Eliminate all ignition sources. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Do not confine in area of spill. Allow liquid to evaporate from the surface. Seek the advice of a specialist before using dispersants. Advise occupants and shipping in downwind areas of fire and explosion hazard and warn them to stay clear. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 6. Accidental release measures

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

# Section 6. Accidental release measures

# Personal precautions, protective equipment and emergency procedures

# For non-emergency personnel

: 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. Put on appropriate personal protective equipment. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

# For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### **Environmental precautions**

: 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

## Methods and material for containment and cleaning up

### **Small spill**

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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# Section 7. Handling and storage

#### Precautions for safe handling

# **Protective measures**

Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not swallow. Avoid breathing vapour or mist. Avoid release to the environment. 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 explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking 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. It is dangerous and/or unlawful to put petrol into unapproved containers. Do not fill

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# Section 7. Handling and storage

container while it is in or on a vehicle. Static electricity may ignite vapour and cause fire. Place container on ground when filling and keep nozzle in contact with container. Do not use electronic devices (including but not limited to cellular phones, computers, calculators, pagers or other electronic devices, etc.) during safety critical tasks, such as bulk fuel loading or unloading operations, or in storage areas where vapours may be present, unless the devices are certified intrinsically safe by an approved national testing agency and to the safety standards required by national and/or local laws and regulations. For use as a motor fuel only. Do not siphon by mouth.

# Advice on general occupational hygiene

: 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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### **Static Accumulator**

: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

# including any incompatibilities

Conditions for safe storage, : 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. Store locked up. Eliminate all ignition sources. Separate from oxidising 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. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

# **Control parameters**

# Occupational exposure limits

| Ingredient name | Exposure limits   |
|-----------------|---|
| GASOLINE        | ExxonMobil (Company).                                     |
|                 | STEL: 200 ppm Form: Vapour.                               |
|                 | TWA: 100 ppm 8 hours. Form: Vapour.                       |
| butane          | ACGIH TLV (United States, 1/2023). [Butane] Explosive     |
|                 | potential.  |
|                 | STEL: 1000 ppm 15 minutes.                                |
| ethylbenzene    | ACGIH TLV (United States, 1/2023). Ototoxicant.           |
|                 | TWA: 20 ppm 8 hours.                                      |
| cumene          | ACGIH TLV (United States, 1/2023).                        |
|                 | TWA: 5 ppm 8 hours.                                       |
|                 | ExxonMobil (Company). Absorbed through skin.              |
|                 | TWA: 5 ppm 8 hours.                                       |
| gasoline        | ACGIH TLV (United States, 1/2023).                        |
|                 | TWA: 300 ppm 8 hours.                                     |
|                 | TWA: 890 mg/m³ 8 hours.                                   |
|                 | STEL: 500 ppm 15 minutes.                                 |
|                 | STEL: 1480 mg/m³ 15 minutes.                              |
|                 | ExxonMobil (Company).                                     |
|                 | STEL: 200 ppm 15 minutes.                                 |
|                 | TWA: 100 ppm 8 hours.                                     |
| p-xylene        | ACGIH TLV (United States, 1/2023). [p-xylene and mixtures |
|                 | containing p-xylene] Ototoxicant.                         |

# Section 8. Exposure controls/personal protection

|   | TIMA 00   |  |
|---|---|--|
|   | TWA: 20 ppm 8 hours.                                      |  |
| naphthalene                                   | ACGIH TLV (United States, 1/2023). Absorbed through skin. |  |
|   | TWA: 10 ppm 8 hours.                                      |  |
|   | TWA: 52 mg/m³ 8 hours.                                    |  |
| xylene  | ACGIH TLV (United States, 1/2023). [p-xylene and mixtures |  |
|   | containing p-xylene] Ototoxicant.                         |  |
|   | TWA: 20 ppm 8 hours.                                      |  |
| n-hexane                                      | ACGIH TLV (United States, 1/2023). Absorbed through skin. |  |
|   | TWA: 50 ppm 8 hours.                                      |  |
| naphtha (petroleum), light catalytic reformed | ExxonMobil (Company).                                     |  |
|   | STEL: 200 ppm 15 minutes.                                 |  |
|   | TWA: 100 ppm 8 hours.                                     |  |
| toluene                                       | ACGIH TLV (United States, 1/2023). Ototoxicant.           |  |
|   | TWA: 20 ppm 8 hours.                                      |  |
| hexane (mixtures of isomers)                  | ACGIH TLV (United States).                                |  |
|   | TWA: 1760 mg/m³ 8 hours.                                  |  |
|   | TWA: 500 ppm 8 hours.                                     |  |
|   | STEL: 3500 mg/m³ 15 minutes.                              |  |
|   | STEL: 1000 ppm 15 minutes.                                |  |
| benzene                                       | ACGIH TLV (United States, 1/2023). Absorbed through skin. |  |
|   | TWA: 0.5 ppm 8 hours.                                     |  |
|   | TWA: 1.6 mg/m <sup>3</sup> 8 hours.                       |  |
|   | STEL: 2.5 ppm 15 minutes.                                 |  |
|   | STEL: 8 mg/m³ 15 minutes.                                 |  |
|   | ExxonMobil (Company). Absorbed through skin.              |  |
|   | STEL: 1 ppm 15 minutes.                                   |  |
|   | TWA: 0.5 ppm 8 hours.                                     |  |
|   |   |  |

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

# **Biological exposure indices**

| Ingredient name | Exposure indices  |
|-----------------|---|
| ethylbenzene    | ACGIH BEI (United States, 1/2023)  BEI: 0.15 g/g creatinine, sum of mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift.   |
| p-xylene        | ACGIH BEI (United States, 1/2023) [xylenes (technical or commercial grade)] BEI: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.  |
| naphthalene     | ACGIH BEI (United States, 1/2023)  BEI: Nonquantitative: Biological monitoring should be considered for this compound based on the review; however, a specific BEI® could not be determined due to insufficient data., 1-naphthol + 2-naphthol [(sample not specified)]. Sampling time: end of shift. |
| xylene          | ACGIH BEI (United States, 1/2023) [xylenes (technical or commercial grade)]  BEI: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.   |
| n-hexane        | ACGIH BEI (United States, 1/2023) BEI: 0.5 mg/l, 2,5-hexanedion [in urine]. Sampling time: end of shift.  |
| toluene         | ACGIH BEI (United States, 1/2023)  BEI: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift.  BEI: 0.3 mg/g creatinine, o-cresol [in urine]. Sampling time: end of shift.  BEI: 0.02 mg/l, toluene [in blood]. Sampling time: prior to last shift of workweek.                                 |

# Section 8. Exposure controls/personal protection

| benzene | ACGIH BEI (United States, 1/2023)                                     |
|---------|---|
|         | BEI: 25 µg/g creatinine, S-phenylmercapturic acid [in urine].         |
|         | Sampling time: end of shift.  |
|         | BEI: 500 µg/g creatinine, t,t-muconic acid [in urine]. Sampling time: |
|         | end of shift  |

# Appropriate engineering 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.

# 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.

## Individual protection measures

# **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

# **Eye/face protection**

: 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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

# Skin protection 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Nitrile, minimum 0.38 mm thickness or comparable protective barrier material

# **Body 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## **Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour filter (Type AX)

# Section 9. Physical and chemical properties and safety characteristics

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**Appearance** 

**Physical state** : Liquid.

Colour : Clear to Pale Yellow (May Be Dyed)

**Odour** Petroleum/Solvent **Odour threshold** : Not available. pН : Not applicable. **Melting point/freezing point** : Not available.

**Boiling point, initial boiling** point, and boiling range

: ≤35°C (≤95°F) [EN ISO 3405]

: Closed cup: <-35°C (<-31°F) [Estimated] Flash point

**Flammability** : Flammable liquids - Category 1

Lower and upper explosion limit/flammability limit

: Lower: 1.4% Upper: 7.6%

: Not available.

: 30 to 1800 mm Hg [37.8 °C] Vapour pressure

: >1 [Air = 1] **Relative vapour density** 

Relative density

**Density** : 0.62 to 0.88 g/cm3 [15°C (59°F)]

: Negligible Solubility in water Partition coefficient: n->3.5

**Evaporation rate** 

octanol/water

**Auto-ignition temperature** : >250°C (>482°F) **Decomposition temperature** : Not available. **Viscosity** : <1 cSt [40 °C]

**Particle characteristics** 

Median particle size : Not applicable.

# Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**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. Do not allow vapour to accumulate in low or confined areas. Heat, sparks, flame, and build

up of static electricity.

Incompatible materials : Reactive or incompatible with the following materials:,oxidising materials, Halogens,

strong acids, Alkalies

**Hazardous decomposition** products

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

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# **Section 11. Toxicological information**

# Information on toxicological effects

### **Acute toxicity**

| Product/ingredient name | Test                   | Species | Result     | Duration |
|-------------------------|------------------------|---------|------------|----------|
| ethylbenzene            | LC50 Inhalation Vapour | Rat     | 17.8 mg/l  | 4 hours  |
|                         | LD50 Oral              | Rat     | 3.5 g/kg   | -        |
| p-xylene                | LC50 Inhalation Vapour | Rat     | 6247 ppm_m | 4 hours  |
| naphthalene             | LC50 Inhalation Vapour | Rat     | >0.4 mg/l  | 4 hours  |
|                         | LD50 Oral              | Mouse   | 533 mg/kg  | -        |

# Conclusion/Summary

Inhalation : Minimally Toxic. No end point data for material. Based on assessment of the

components.

**Dermal** : Minimally Toxic. No end point data for material. Based on assessment of the

components.

Oral : Minimally Toxic. No end point data for material. Based on assessment of the

components.

# **Irritation/Corrosion**

# **Conclusion/Summary**

**Skin**: Irritating to the skin. No end point data for material. Based on assessment of the

components.

**Eyes** : May cause mild, short-lasting discomfort to eyes. No end point data for material.

Based on assessment of the components.

**Respiratory** : Negligible hazard at ambient/normal handling temperatures. No end point data for

material. Elevated temperatures or mechanical action may form vapours, mist, or

fumes which may be irritating to the eyes, nose, throat, or lungs.

# **Sensitisation**

## **Conclusion/Summary**

Skin : Not expected to be a skin sensitizer. No end point data for material. Based on

assessment of the components.

Respiratory

: Not expected to be a respiratory sensitizer. No end point data for material.

**Mutagenicity** 

**Conclusion/Summary**: May cause genetic defects. No end point data for material. Based on assessment of

the components.

Carcinogenicity

**Conclusion/Summary**: May cause cancer. No end point data for material. Based on assessment of the

components.

# Classification

| Product/ingredient name | IARC |
|-------------------------|------|
| ethylbenzene            | 2B   |
| cumene                  | 2B   |
| gasoline                | 2B   |
| p-xylene                | 3    |
| naphthalene             | 2B   |
| xylene                  | 3    |
| toluene                 | 3    |
| benzene                 | 1    |

# Reproductive toxicity

**Conclusion/Summary** : May damage fertility. May damage the unborn child. No end point data for material. Based on assessment of the components.

### Specific target organ toxicity (single exposure)

**Conclusion/Summary**: May cause drowsiness or dizziness. No end point data for material. Based on

assessment of the components.

# Specific target organ toxicity (repeated exposure)

# **Section 11. Toxicological information**

**Conclusion/Summary** 

: Not expected to cause organ damage from prolonged or repeated exposure. No end point data for material. Based on assessment of the components.

# <u>Aspiration hazard</u> Conclusion/Summary

: May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material. No end point data for material.

# Other information Contains

Gasoline unleaded: Carcinogenic in animal tests. Chronic inhalation studies resulted in liver tumours in female mice and kidney tumours in male rats. Neither result considered significant for human health risk assessment by the United States EPA and others. Did not cause mutations in-vitro or in-vivo. Negative in inhalation developmental studies and reproductive tox studies. Inhalation of high concentrations in animals resulted in reversible central nervous system depression, but no persistent toxic effect on the nervous system. Non-sensitizing in test animals. Caused nerve damage in humans from abusive use (sniffing). NAPHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain. ETHYLBENZENE: Caused cancer in laboratory animal studies. The relevance of these findings to humans is uncertain. BENZENE: Caused cancer (acute myeloid leukemia and myelodysplastic syndrome), damage to the blood-producing system, and serious blood disorders in human studies. Caused genetic effects and effects on the immune system in laboratory animal and some human studies. Caused toxicity to the fetus and cancer in laboratory animal studies. CUMENE: Repeated inhalation exposure of cumene vapour produced damage in the kidney of male rats only. These effects are believed to be species specific and are not relevant to humans. N-HEXANE: Prolonged and/or repeated exposures to n-Hexane can cause progressive and potentially irreversible damage to the peripheral nervous system (e.g. fingers, feet, arms, legs, etc.). Simultaneous exposure to Methyl Ethyl Ketone (MEK) or Methyl Isobutyl Ketone (MIBK) and n-Hexane can potentiate the risk of adverse effects from n-Hexane on the peripheral nervous system. n-Hexane has been shown to cause testicular damage at high doses in male rats. The relevance of this effect for humans is unknown. Contains hexane; individuals with pre-existing neurological disease should avoid exposure. TOLUENE: Concentrated, prolonged or deliberate inhalation may cause brain and nervous system damage. Prolonged and repeated exposure of pregnant animals (> 1500 ppm) have been reported to cause adverse fetal developmental effects. Petroleum naphtha: Carcinogenic in animal tests. Chronic inhalation studies resulted in liver tumours in female mice and kidney tumours in male rats. Neither result considered significant for human health risk assessment by United States EPA and others. Did not cause mutations in-vitro. Inhalation of vapours did not result in reproductive or developmental effects in test animals. Inhalation of high concentrations in animals resulted in reversible central nervous system depression, but no persistent toxic effect on the nervous system. Non-sensitizing in test animals.

#### **Product**

Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Laboratory animal studies have shown that prolonged and repeated inhalation exposure to light hydrocarbon vapours in the same boiling range as this product can produce adverse kidney effects in male rats. However, these effects were not observed in similar studies with female rats, male and female mice, or in limited studies with other animal species. Additionally, in a number of human studies, there was no clinical evidence of such effects at normal occupational levels. In 1991, The U.S. EPA determined that the male rat kidney is not useful for assessing human risk. Exposure to this material, or one of its components, in situations where there is the potential for high levels, such as in confined spaces or with abuse, may result in abnormal heart rhythm (arrhythmia). High-level exposure to hydrocarbons (above occupational exposure limits) may initiate arrhythmia in a worker that is undergoing stress or is taking a heart-stimulating substance such as epinephrine, a nasal decongestant, or an asthma or cardiovascular drug. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

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# **Section 12. Ecological information**

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

# **Toxicity**

# **Conclusion/Summary**

**Acute toxicity** : Toxic to aquatic life.

**Chronic toxicity**: Toxic to aquatic life with long lasting effects.

# Persistence and degradability

Biodegradability : Material -- Expected to be inherently biodegradable

Atmospheric Oxidation : Majority of components -- Expected to degrade rapidly in air

### **Bioaccumulative potential**

Conclusion/Summary : Majority of comp

: Majority of components -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

# **Mobility in soil**

**Mobility** 

: High molecular wt. component -- Low potential to migrate through soil. Low molecular wt. component -- Moderate potential to migrate through soil. Majority of components -- Highly volatile, will partition rapidly to air. Moderate potential to migrate through soil. Not expected to partition to sediment and wastewater solids.

# Other ecological information

VOC content : 100 % by weight

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

# **INTERNATIONAL OIL POLLUTION COMPENSATION (IOPC)**

Material is considered a non-persistent oil.

# Section 13. Disposal considerations

# **Disposal methods**

: The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

# **MARPOL**

: see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

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# **Section 14. Transport information**

|                            | IMDG     |
|----------------------------|----------|
| UN number                  | UN1203   |
| UN proper shipping name    | GASOLINE |
| Transport hazard class(es) | 3        |
| Label(s) / Mark(s)         |          |
| Packing group              | II       |
| Environmental hazards      | Yes.     |

# **Additional information**

**IMDG** 

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules F-E, S-E Special provisions 243

Flash point <-35 °C C.C.

Note - this material is being carried under the scope of MARPOL Annex I

# **Section 15. Regulatory information**

# International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

### **Montreal Protocol**

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)** 

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals** 

Not listed.

**Inventory list** 

Australia inventory (AIIC) : At least one component is not listed.

Canada inventory (DSL-NDSL) : Restrictions Apply

China inventory (IECSC) : At least one component is not listed.

Japan inventory (CSCL) : At least one component is not listed.

Japan inventory (Industrial Safety and : Not determined.

Health Act)

New Zealand Inventory of Chemicals : At least one component is not listed.

(NZIoC)

Philippines inventory (PICCS) : At least one component is not listed.

Korea inventory (KECI) : At least one component is not listed.

Taiwan Chemical Substances Inventory : At least one component is not listed. (TCSI)

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# Section 15. Regulatory information

United States inventory (TSCA 8b) : At least one component is not listed.

# Section 16. Other information

**History** 

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revision

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**Key to abbreviations** : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

# Procedure used to derive the classification

#### Classification **Justification** FLAMMABLE LIQUIDS - Category 1 On basis of test data SKIN CORROSION/IRRITATION - Category 2 Calculation method GERM CELL MUTAGENICITY - Category 1B Calculation method CARCINOGENICITY - Category 1B Expert judgment REPRODUCTIVE TOXICITY - Category 2 Calculation method SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) -Calculation method Category 3 ASPIRATION HAZARD - Category 1 Calculation method SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 2 Calculation method LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

THIS SDS COVERS THE FOLLOWING MATERIALS:

**GASOLINE** 

Product code : 1205410

# **Notice to reader**

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