

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

1.1. Product identifier

Product form : Substance
 Trade name : Gasoline A - External market
 Chemical name : Naphtha (petroleum), unsweetened
 CAS No : 68783-12-0^[1]
 Formula : Unspecified
 Synonyms : motor spirit / gasoline or petrol

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

Use of the substance/mixture : Cleaning agent
 Coatings
 Distribution of substance
 Formulation of preparations (mixtures).
 Fuels
 Manufacture of rubber products.
 Manufacture of substances
 Use as an intermediate

1.3. Details of the supplier of the safety data sheet

US office:
 Braskem S.A.
 5100 Westheimer Rd - Suite 495
 Houston, 77056 - USA

Manufacturer:
 Braskem S.A.
 Rua Eteno, 1561, Polo Petroquímico de Camaçari
 Camaçari, BA, CEP: 42810-000, Brasil

Braskem S.A.
 BR 386 – Rodovia Tabai-Canoas, km 419, Via do Contorno, 850
 Triunfo, RS, CEP: 95853-000, Brasil

Braskem S.A.
 Av. Presidente Costa e Silva, 1178 – Capuava
 Santo André, SP, CEP: 09270-001, Brasil

Contact Email : productsafety@braskem.com
 Emergency Telephone Number (CHEMTREC) : 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 2 H225
 Muta. 1B H340
 Carc. 1B H350
 STOT SE 3 H336
 Asp. Tox. 1 H304

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H225 - Highly flammable liquid and vapor H304 - May be fatal if swallowed and enters airways H336 - May cause drowsiness or dizziness H340 - May cause genetic defects H350 - May cause cancer
Precautionary statements (GHS-US)	: P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking P233 - Keep container tightly closed P240 - Ground/bond container and receiving equipment P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools P243 - Take precautionary measures against static discharge P261 - Avoid breathing mist P271 - Use only outdoors or in a well-ventilated area P280 - Wear eye protection, protective clothing, protective gloves P301+P310 - If swallowed: Immediately call a 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 P312 - Call a doctor if you feel unwell P331 - Do NOT induce vomiting P370+P378 - In case of fire: Use carbon dioxide (CO ₂), dry extinguishing powder, foam to extinguish P403+P233 - Store in a well-ventilated place. Keep container tightly closed P403+P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up P501 - Dispose of contents/container to comply with applicable local, national and international regulation.

2.3. Other hazards

other hazards which do not result in classification : Vapors can travel considerable distances to a source of ignition where they can ignite, flash back, or explode.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type : UVCB
Name : Naphtha, petroleum, unsweetened
CAS No : 68783-12-0

Name	Product identifier	%
Aromatic hydrocarbons	Not available	< 45
Olefin Hydrocarbons	Not available	< 28
benzene	(CAS No) 71-43-2	< 1

Full text of H-statements: see section 16

Synonym: motor spirit, gasoline, petrol

3.2. Mixture

Not applicable

4.1. Description of first aid measures

First-aid measures after inhalation : Remove victim to fresh air. Do not apply mouth-to-mouth resuscitation. In case of breathing difficulties administer oxygen. If breathing is irregular or stopped, administer artificial respiration. Seek medical advice (show the label where possible).

First-aid measures after skin contact : Remove contaminated clothing and shoes. Rinse immediately with plenty of water for 15 minutes. Do not rub the skin and eyes after direct contact with the product. Obtain medical attention if irritation persists.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub the skin and eyes after direct contact with the product. Seek medical attention if irritation develops.

First-aid measures after ingestion : Do not induce vomiting. Rinse mouth. 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. Seek medical advice (show the label where possible).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May cause cancer. May cause genetic defects.
 Symptoms/injuries after inhalation : Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.
 Symptoms/injuries after skin contact : Prolonged or repeated contact with the skin may cause dermatitis.
 Symptoms/injuries after eye contact : May cause slight temporary irritation.
 Symptoms/injuries after ingestion : May be harmful if swallowed. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination. May result in aspiration into the lungs, causing chemical pneumonia.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO₂), dry chemical powder, foam. Water fog.
 Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor. The vapors are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars. Heavier than air, vapors may travel long distances along ground, ignite and flash back to source. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.
 Explosion hazard : Prolonged exposure to fire may cause containers to rupture/explode.
 Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Advice for firefighters

Firefighting instructions : Cool closed containers exposed to fire with water spray. Exercise caution when fighting any chemical fire.
 Protective equipment for firefighters : Wear recommended personal protective equipment. In case of fire: Wear self-contained breathing apparatus. Refer to section 8.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate all ignition sources if safe to do so. Keep away from sources of ignition - No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing, gloves and eye/face protection. Refer to section 8.
 Emergency procedures : Eliminate all ignition sources if safe to do so. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing. In case of fire: Wear self-contained breathing apparatus. Refer to section 8.
 Emergency procedures : Eliminate every possible source of ignition. Evacuate and limit access.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Prevent spread over a wide area (e.g. by containment or oil barriers).
 Methods for cleaning up : Absorb remaining liquid with sand or inert absorbent and remove to safe place. Collect in closed containers for disposal.

6.4. Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection. For disposal of residues refer to section 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist. Wear recommended personal protective equipment. Handle in accordance with good industrial hygiene and safety procedures.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash contaminated clothing prior to re-use.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Keep away from open flames, hot surfaces and sources of ignition. Proper grounding procedures to avoid static electricity should be followed. Use only non-sparking tools.
- Storage conditions : Store in dry, cool, well-ventilated area. Keep away from open flames, hot surfaces and sources of ignition. Keep container tightly closed. Protect containers against damage.
- Incompatible materials : Strong oxidizing agents.

7.3. Specific end use(s)

refer to section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

benzene (71-43-2)		
ACGIH	ACGIH TWA (ppm)	0.50 ppm
ACGIH	ACGIH STEL (ppm)	2.5 ppm
ACGIH	Remark (ACGIH)	Leukemia

8.2. Exposure controls

- Appropriate engineering controls : Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Hand protection : Impermeable protective gloves. It is recommended that the glove supplier be consulted to ensure the protective gloves are resistant to chemicals in this product.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Use chemically protective clothing.
- Respiratory protection : Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment.
- Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Color : Colorless
- Odor : Aromatic hydrocarbons
- Odor threshold : No data available
- pH : No data available
- Relative evaporation rate (butyl acetate=1) : 4 - 10
- Melting point : No data available
- Freezing point : No data available
- Boiling point : 58.6 a 67.1 °C
- Flash point : -45 a -38 °C
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapor pressure : 400 - 775 mm Hg (20°C)
- Relative vapor density at 20 °C : 3 - 4
- Relative density : No data available
- Density : 0.7546 - 0.7582

Solubility	: Water: Insoluble Ethanol: Soluble Ether: Soluble
Log Pow	: 1.8 - 4.56
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 1.4 - 7.6 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

On burning: release of (highly) toxic gases/vapors. Hydrocarbon substances with low molecular weight and their oxidation products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Naphtha, petroleum, unsweetened (68783-12-0)	
LD50 oral rat	4820 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	4820.000 mg/kg bodyweight

benzene (71-43-2)	
LD50 oral rat	810 mg/kg
LD50 dermal rabbit	> 8200 mg/kg
LC50 inhalation rat (mg/l)	44.66 mg/l/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.

benzene (71-43-2)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/injuries after inhalation	: Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

Symptoms/injuries after skin contact	: Prolonged or repeated contact with the skin may cause dermatitis.
Symptoms/injuries after eye contact	: May cause slight temporary irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination. May result in aspiration into the lungs, causing chemical pneumonia.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : This material has not been tested for environmental effects.

benzene (71-43-2)	
LC50 fish 1	10.7 - 14.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	8.76 - 15.6 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 fish 2	5.3 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 2	10 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and degradability

benzene (71-43-2)	
Persistence and degradability	Readily biodegradable. not persistent.

12.3. Bioaccumulative potential

Gasoline A - External market (68783-12-0)	
Log Pow	1.8 - 4.56
benzene (71-43-2)	
BCF fish 1	3.5 - 4.4
Bioconcentration factor (BCF REACH)	> 2000
Log Pow	1.83
Bioaccumulative potential	not bioaccumulable.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer	: No additional information available
Effect on the global warming	: No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose as hazardous waste. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Classification for LAND transport: DOT

UN Number	: UN1203
Proper Shipping Name	: Gasoline
Class / Division	: 3
Packing group	: II
Reportable quantity	: Not applicable

Classification for SEA transport: IMO - IMDG

UN Number	: UN1203
Proper shipping name	: GASOLINE
Class / Division	: 3
Packing group	: II
Marine pollutant	: This product has not been tested for environmental effects.

Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code:

Product name : Consult IMO regulations before transporting in bulk

Classification for AIR transport: IATA - ICAO

UN Number	: UN1268
Proper Shipping Name	: Gasoline
Class / Division	: 3
Packing group	: II

This information does not intend to convey all specific regulatory or operational requirements/information relating to the product, therefore it cannot be considered exhaustive. Consult US DOT, IMO and ICAO regulations before transporting the product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: Regulatory information

15.1. US Federal regulations

Gasoline A - External market (68783-12-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

benzene (71-43-2)

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting	0.1 %
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15.2. International regulations

CANADA

Gasoline A - External market (68783-12-0)

Listed on the Canadian DSL (Domestic Substances List)

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benzene (71-43-2)

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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EU-Regulations

Gasoline A - External market (68783-12-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Gasoline A - External market (68783-12-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

benzene (71-43-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.2.2. National regulations

Gasoline A - External market (68783-12-0)

Listed on the AICS (Australian Inventory of Chemical Substances)

Gasoline A - External market (68783-12-0)

Listed on the AICS (Australian Inventory of Chemical Substances)

benzene (71-43-2)

Listed on IARC (International Agency for Research on Cancer)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on the Canadian IDL (Ingredient Disclosure List)
Listed on INSQ (Mexican national Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)

15.3. US State regulations

benzene (71-43-2)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	Yes	No	Yes	6.4 µg/day

SECTION 16: Other information

Sources of Key data	: Data arise from reference works and literature.
Abbreviations	: ACGIH – American Conference of Governmental Industrial Hygienists IARC – International Agency for Research on Cancer STEL – short-term exposure TWA – time-weighted average

Full text of H-statements:

-----	Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
-----	Asp. Tox. 1	Aspiration hazard, Category 1
-----	Carc. 1A	Carcinogenicity, Category 1A
-----	Carc. 1B	Carcinogenicity, Category 1B
-----	Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
-----	Flam. Liq. 2	Flammable liquids Category 2
-----	Muta. 1B	Germ cell mutagenicity, Category 1B
-----	Skin Irrit. 2	Skin corrosion/irritation Category 2
-----	STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
-----	STOT SE 3	Specific target organ toxicity (single exposure) Category 3
-----	H225	Highly flammable liquid and vapor
-----	H302	Harmful if swallowed
-----	H304	May be fatal if swallowed and enters airways
-----	H315	Causes skin irritation
-----	H319	Causes serious eye irritation
-----	H336	May cause drowsiness or dizziness
-----	H340	May cause genetic defects
-----	H350	May cause cancer
-----	H372	Causes damage to organs through prolonged or repeated exposure

Braskem - SDS US

Other information: From the point of view of transport risks CAS 68783-12-0 behaves similar to the risks of CAS 86290-81-5 (Gasoline).

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It warns that the handling of any chemical substance requires the previous knowledge of its hazards for the user. It is up to the user of the product company providing this SDS to and promote the training of its employees about possible risks come upon of the product. The information contained herein is not absolute, but only general information on the use of the chemical and indication of safety and security measures.