SAFETY DATA SHEET

HBF 4

SDS # : C3J2GAC4K

Section 1. Identification

Product identifier : HBF 4

Recommended use of the chemical and restrictions on use

Identified uses
Brake fluids.

Supplier's details :

TotalEnergies Lubrifiants
562 Avenue du Parc de L'ile
92029 Nanterre Cedex FRANCE
Tél: +33 (0)1 41 35 40 00
Fax: +33 (0)1 41 35 84 71
rm.msds-lubs@totalenergies.com

TotalEnergies Marketing Services
Direction Afrique
24 cours Michelet
92800 PUTEAUX
FRANCE
Tel : +33 (0)1 41 35 40 00
Fax : +33 (0)1 41 35 82 88
See section 16 to have the contact details of the local supplier

Emergency telephone number : +44 1235 239671
To speak to an interlocutor in Portuguese or Spanish: +44 1235 239670

Section 2. Hazard identification

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H318 - Causes serious eye damage.

Precautionary statements

General : If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read carefully and follow all instructions.

Prevention : Wear eye or face protection.

Response : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage : Not applicable.

Section 2. Hazard identification

Disposal : Not applicable.

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

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	% (w/w)	Identifiers
2-[2-(2-butoxyethoxy)ethoxy]ethanol	≥25 - ≤50	143-22-6
diethylene glycol	<10	111-46-6
2-(2-butoxyethoxy)ethanol	≤3	112-34-5

Additional information : The product is made from synthetic base oils

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.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Call a poison center or physician. 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. 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 : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. 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.

Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : 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 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : carbon monoxide
carbon dioxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire-fighting measures

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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 spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized 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 spilled 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).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. 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. Move containers from spill area. Approach 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store between the following temperatures: 18 to 23°C (64.4 to 73.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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 unlabeled 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 UN

Product/substance	Exposure limit values
2-(2-butoxyethoxy)ethanol	**ACGIH TLV (United States, 1/2022).** TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor

Biological exposure indices UN

No exposure indices known.

Occupational exposure limits Egypt

Product/substance	Exposure limit values
None.	

Biological exposure indices Egypt

No exposure indices known.

Occupational exposure limits Lesotho

Product/substance	Exposure limit values
None.	

Biological exposure indices Lesotho

No exposure indices known.

Occupational exposure limits South Africa

Product/substance	Exposure limit values
2-(2-butoxyethoxy)ethanol	**ACGIH TLV (United States, 1/2022).** TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor

Biological exposure indices South Africa

No exposure indices known.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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.

Advisory OEL : No known significant effects or critical hazards.

Individual protection measures

Section 8. Exposure controls/personal protection

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: Tightly-fitting goggles or face shield.

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.
Hydrocarbon-proof gloves
Fluorinated rubber
nitrile rubber
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

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.

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.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

Appearance

Physical state : Liquid. [limpid]

Color : Amber.

Odor : Bland.

Odor threshold : Not available.

pH : 7.5

Melting point/freezing point : <50°C (<122°F)

Boiling point : >230°C (>446°F)

Flash point : Open cup: >100°C (>212°F)

Evaporation rate : 0.01 (butyl acetate = 1)

Flammability (solid, gas) : Not applicable.

Lower and upper explosive (flammable) limits : Not available.

Section 9. Physical and chemical properties and safety characteristics

Vapor pressure : 0.1 kPa (0.75006 mm Hg)

Vapor density : Not available.

Relative density : 1.08 [ASTM D 4052]

Density : 1.08 g/cm³ [15°C] [ASTM D 4052]

Solubility(ies) :

Media	Result
water	Soluble

Miscible with water : Yes.

Partition coefficient: n-octanol/water : <2

Auto-ignition temperature : >300°C (>572°F)

Decomposition temperature : >300°C (>572°F)

Viscosity : Kinematic (room temperature): 5 to 10 mm^2/s (5 to 10 cSt)
Kinematic (40°C (104°F)): 1350 mm^2/s (1350 cSt) [ASTM D 7042]

Flow time (ISO 2431) : Not available.

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 : Stable under recommended storage and handling conditions (see Section 7).

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

Conditions to avoid : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon monoxide
carbon dioxide

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Section 11. Toxicological information

Product/substance	Result	Species	Dose	Exposure	Test
2-[2-(2-butoxyethoxy)ethoxy] ethanol	LD50 Dermal	Rabbit	3480 mg/kg	-	-
	LD50 Oral	Rat	5300 mg/kg	-	-
diethylene glycol	LD50 Dermal	Rabbit	11890 mg/kg	-	-
	LD50 Dermal	Rabbit	13300 mg/kg	-	-
	LD50 Oral	Rat	12000 mg/kg	-	-
	LD50 Oral	Rat	500 mg/kg ATE value Category 4	-	TEPA and OECD
2-(2-butoxyethoxy)ethanol	LD50 Dermal	Rabbit	2700 mg/kg	-	-
	LD50 Dermal	Rabbit - Male	2764 mg/kg	-	OECD 402
	LD50 Oral	Mouse - Male	2410 mg/kg	-	OECD 401
	LD50 Oral	Rat	4500 mg/kg	-	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
2-[2-(2-butoxyethoxy)ethoxy] ethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	50 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
diethylene glycol	Skin - Mild irritant	Rabbit	-	500 mg	-
2-(2-butoxyethoxy)ethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	20 mg	-

Skin : Based on available data, the classification criteria are not met. The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, skin irritation classification is not required

Eyes : Based on available data, the classification criteria are met.

Respiratory : Based on available data, the classification criteria are not met.

Sensitization

Product/substance	Route of exposure	Species	Result
diethylene glycol	skin	Guinea pig	Not sensitizing

Skin : Based on available data, the classification criteria are not met.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity

Product/substance	Test	Experiment	Result
diethylene glycol	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria Cell: Somatic	Negative
	OECD 473 *In vitro* Mammalian Chromosomal Aberration Test	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Negative
	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative

Section 11. Toxicological information

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Product/substance	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
diethylene glycol	Negative Negative	Negative Negative	Negative Negative	Mouse - Male, Female Rat - Male, Female	Oral Oral	- -

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Product/substance	Result	Species	Dose	Exposure
diethylene glycol	Negative - Oral	Rat	-	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Aspiration hazard

Not available.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

Section 11. Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/substance	Result	Species	Dose	Exposure
diethylene glycol	Sub-acute NOAEL Oral	Rat - Male, Female	936 mg/kg	-
	Sub-chronic NOAEL Oral	Rat - Male, Female	300 mg/kg	-

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/substance	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
HBF 4	5005.0	7735.1	N/A	N/A	N/A
2-[2-(2-butoxyethoxy)ethoxy]ethanol	5300	3480	N/A	N/A	5.1
diethylene glycol	500	11890	N/A	N/A	N/A

Other information :

Not available.

Section 12. Ecological information

Toxicity

Product/substance	Result	Species	Exposure	Test
2-[2-(2-butoxyethoxy)ethoxy]ethanol	Acute EC50 500 mg/l	Algae - *Desmodesmus subspicatus*	72 hours	-
	Acute EC50 500 mg/l	Daphnia - *Daphnia magna*	48 hours	-
	Acute LC50 2182 mg/l	Fish	96 hours	-
diethylene glycol	Acute EC50 >100 mg/l	Algae	72 hours	-
	Acute EC50 62600 mg/l	Crustaceans - *Daphnia magna*	48 hours	-
	Acute LC50 75200000 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours	-
	Chronic NOEC >100 mg/l	Algae	72 hours	-
2-(2-butoxyethoxy)ethanol	Acute EC50 100 mg/l	Algae - *Desmodesmus*	72 hours	-

Section 12. Ecological information

	Acute EC50 100 mg/l Acute LC50 1300 mg/l	*subspicatus* Daphnia - *Daphnia magna* Fish	48 hours 96 hours	- -

Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
diethylene glycol	OECD 301B	75 % - Readily - 28 days	-	Activated sludge

Product/substance	Aquatic half-life	Photolysis	Biodegradability
2-[2-(2-butoxyethoxy)ethoxy] ethanol	-	-	Readily
diethylene glycol	-	-	Readily
2-(2-butoxyethoxy)ethanol	-	-	Readily

Bioaccumulative potential

Product/substance	$LogK_{ow}$	BCF	Potential
HBF 4	<2	-	Low
2-[2-(2-butoxyethoxy)ethoxy] ethanol	0.51	-	Low
diethylene glycol	-1.98	100	Low
2-(2-butoxyethoxy)ethanol	0.56	-	Low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility in soil : Given its physical and chemical characteristics, the product generally shows low soil mobility Loss by evaporation is limited Soluble in water

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized 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. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADR	IMDG	ICAO/IATA
UN/ID No	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

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) : Not determined.

Canada inventory (DSL/NDSL) : Not determined.

China inventory (IECSC) : Not determined.

Europe inventory (EC) : Not determined.

Japan inventory : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): Not determined.

New Zealand Inventory of Chemicals (NZIoC) : Not determined.

Philippines inventory (PICCS) : Not determined.

Korea inventory (KECI) : Not determined.

Section 15. Regulatory information

Taiwan Chemical Substances Inventory (TCSI) : Not determined.

Thailand inventory : Not determined.

Turkey inventory : Not determined.

United States inventory (TSCA 8b) : Not determined.

Vietnam inventory : Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

Section 16. Other information

History

Date of revision : 2024/02/07

previous revision date : No previous validation

Version : 1

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
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method

Additionnal details on the supplier of the product

TotalEnergies Marketing Botswana (Pty) Ltd Kgomokasitwa Road, Gaborone West Gaborone / BOTSWANA	TotalEnergies Marketing Burkina 1080, Avenue Kwame N'Krumah Ouagadougou / BURKINA FASO	TotalEnergies Marketing Cameroun 589, Boulevard de la Liberté Akwa - Douala B.P. 4048 Douala – Cameroun Téléphone : (237) 233 42 63 41	TOTAL CENTRAFRIQUE Avenue de l'Indépendance, BP 3295 Bangui / REPUBLIQUE CENTRAFRICAINE
TotalEnergies Marketing Congo S.A. Rue de la Corniche Brazzaville / CONGO	TotalEnergies Marketing Côte d'Ivoire Immeuble Rive Gauche, 100 Rue des brasseurs, Zone 3 01 BP 336 - Abidjan – CÔTE D'IVOIRE	TotalEnergies Marketing Egypt Corner St 254/206 Degla Maadi Cairo / EGYPT	TotalEnergies Marketing Ethiopia S.C. Sub City - Nefas Silk Lafto PO Box 1462 - Addis Abeba / ETHIOPIA Tel : 251 114 651 125
TotalEnergies Marketing Guinea Ecuatorial Rotonda Estación de Servicios BP 647 Malabo / GUINEA ECUATORIAL Tel : +240 350 091 800	TotalEnergies Marketing Kenya PLC Regal Plaza, 6th Avenue Parklands, Limuru Road P.O. BOX 30736, 00100- NAIROBI – KENYA	TOTAL LESOTHO (PTY) LTD Motsoane Road, Industrial area Maseru / LESOTHO	TOTAL LIBERIA Clara town, Busrod Island Monrovia / LIBERIA

Section 16. Other information

TotalEnergies Marketing Madagasikara SA Immeuble Fitaratra, Ankorondrano 101 - Antananarivo - MADAGASCAR	TotalEnergies Marketing Malawi Ltd Private Bag 5125 Limbe, Blantyre Malawi	TotalEnergies Marketing Mali Hamdallaye ACI 2000 Rue 358 Immeuble Dakolo Bamako / MALI	TotalEnergies Marketing Gabon Blvd.de la République Libreville / GABON
TotalEnergies Marketing Middle East FZE Burjuman Business Tower, 11th Floor Sheikh Khalifa Bin Zayed Road Dubai P.O. Box 14871 U.A.E Tel: +971 4 709 50 00 Fax: +971 4 351 91 54	TotalEnergies Marketing Tchad Parc des Hydrocarbures Route de Mara N'Djamena / TCHAD Tel : +235 22 52 92 09	TotalEnergies Marketing Maroc 146, Blvd. Mohamed Zerktouni Casablanca / MAROC	TOTAL MAURITANIE E nord- Lot n°110 Nouakhott / MAURITANIE
TotalEnergies Marketing Mauritius Ltd Chaussée Tromelin, Quai D Port-Louis, MAURICE Tel : +230 207 56 00	TotalEnergies Marketing Mozambique SA Av. Sociedade de Geografia nº 83 Maputo / MOZAMBIQUE Tel : +258 21 30 72 30	TotalEnergies Marketing Namibia (Pty) Ltd 5 Otto Nitzsche Street, Klein Windhoek Windhoek / NAMIBIA	TotalEnergies Marketing Ghana PLC 25 Liberia Road, P.O. BOX GP553 Accra / GHANA Tel : +233 302 611 530
TotalEnergies Marketing RDC SA 24, Avenue CADECO Place des Evolués KINSHASA / GOMBE	TotalEnergies Marketing Sénégal Route de l'aéroport, sur la station TotalEnergies de Ngor BP 355 Dakar / SENEGAL	TOTAL SIERRA LEONE Total house, 41 Main motor Road, Brookfields Freetown / SIERRA LEONE	TotalEnergies Marketing South Africa (Pty) Ltd 3 Biermann Avenue Rosebank 2196 PO Box 579, Saxonwold, 2132 South Africa Tel: +27 860 111 111
TotalEnergies Marketing Eswatini (PTY) Ltd King Sobhuza 2nd Avenue, Industrial Sites Manzini / ESWATINI	TotalEnergies Marketing Tanzania Total House – Msasani Peninsula Haile Selassie road Plot no. 1720, PO Box 1503 Dar es salaam, Tanzania Tel +255222927700	TotalEnergies Marketing Togo 69, Blvd. de la Paix Lomé / TOGO	TotalEnergies Marketing Tunisie Rue du Lac Huron 1053 Les Berges du Lac Tunis / TUNISIE
TotalEnergies Marketing Uganda Limited Plot 4, 8th Street, Industrial Area, P.O. Box 3079., Kampala, Uganda	TotalEnergies EP Nigeria Limited Plot 25, Trans Amadi Industrial Layout P.M.B 5160 and P.O.Box 696, Port Harcourt Nigeria.	TotalEnergies Marketing Zambia Ltd Total House Great East Road Lusaka / ZAMBIA Tel : +260 211 374 403	TotalEnergies Marketing Zimbabwe Total House 1 Auckland Road - Southerton Harare / ZIMBABWE Tel : +263 242 754 481
Totalgaz Southern Africa (Pty) Ltd. 2nd Floor, Tygervalley, Chambers Two Bellville, 7530 Western Cape - South Africa Tel: +27 21 941 4000 Fax: +27 21 941 4001	TotalEnergies Guinée S.E Coléah – Km 4, Route du Niger BP 306-Conakry République de Guinée		

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
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