



# SAFETY DATA SHEET

## MULTIS MS 2

SDS # : 090016

### Section 1. Identification

**Product identifier** : MULTIS MS 2

#### Recommended use of the chemical and restrictions on use

##### Identified uses

grease

**Supplier's details** :

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

TOTAL - Direction Afrique  
24, cours Michelet  
92800 PUTEAUX  
FRANCE  
Tel : +33 (0)1 41 35 40 00  
Fax : +33 (0)1 41 35 82 88

**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** : SKIN CORROSION/IRRITATION - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 12.7%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 12.7%

#### GHS label elements

**Signal word** : Warning

**Hazard statements** : H316 - Causes mild skin irritation.

#### Precautionary statements

**Prevention** : Not applicable.

**Response** : If skin irritation occurs: Get medical advice/attention.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Other hazards which do not result in classification** : Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	%	Identifiers
Distillates (petroleum), solvent-dewaxed light paraffinic	≥10 - ≤23	64742-56-9
Distillates (petroleum), hydrotreated heavy naphthenic	≥10 - ≤20	64742-52-5
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	<2.5	68457-79-4
calcium(2+) 12-hydroxyoctadecanoate	≤3	3159-62-4

**Additional information** : Mineral oil of petroleum origin Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

**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** : 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 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 adverse health effects persist or are severe. 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** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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** : No known significant effects or critical hazards.
- Skin contact** : Causes mild skin irritation. Defatting to the skin.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : No specific data.

### 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
sulfur oxides  
metal oxide/oxides

**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.

**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. 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** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. 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 ingest. Avoid contact with eyes, skin and clothing. 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.

- Conditions for safe storage, including any incompatibilities** : 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. 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
Distillates (petroleum), solvent-dewaxed light paraffinic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Distillates (petroleum), hydrotreated heavy naphthenic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction

#### Occupational exposure limits Egypt

Product/substance	Exposure limit values
Distillates (petroleum), hydrotreated heavy paraffinic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Distillates (petroleum), solvent-dewaxed light paraffinic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Distillates (petroleum), hydrotreated heavy naphthenic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
molybdenum disulphide	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 10 mg/m <sup>3</sup> , (as Mo) 8 hours. Form: Inhalable fraction TWA: 3 mg/m <sup>3</sup> , (as Mo) 8 hours. Form: Respirable fraction

#### Occupational exposure limits Lesotho

Product/substance	Exposure limit values
Distillates (petroleum), hydrotreated heavy paraffinic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Distillates (petroleum), solvent-dewaxed light paraffinic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Distillates (petroleum), hydrotreated heavy naphthenic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
molybdenum disulphide	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 10 mg/m <sup>3</sup> , (as Mo) 8 hours. Form: Inhalable fraction TWA: 3 mg/m <sup>3</sup> , (as Mo) 8 hours. Form: Respirable fraction

#### Occupational exposure limits South Africa

Product/substance	Exposure limit values
Distillates (petroleum), hydrotreated heavy paraffinic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Distillates (petroleum), solvent-dewaxed light paraffinic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Distillates (petroleum), hydrotreated heavy naphthenic	<b>ACGIH TLV (United States, 3/2019).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction
Limestone	<b>DOL OEL (South Africa, 8/1995). Notes: Recommended limit</b> TWA: 5 mg/m <sup>3</sup> 8 hours. Form: respirable dust TWA: 10 mg/m <sup>3</sup> 8 hours. Form: total inhalable dust
molybdenum disulphide	<b>DOL OEL (South Africa, 8/1995). Notes: Recommended limit</b> TWA: 10 mg/m <sup>3</sup> , (as Mo) 8 hours. STEL: 20 mg/m <sup>3</sup> , (as Mo) 15 minutes.

### Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

## Section 8. Exposure controls/personal protection

- 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** : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m<sup>3</sup>, NIOSH (REL) TWA 5 mg/m<sup>3</sup>, STEL 10 mg/m<sup>3</sup>, ACGIH (TLV) TWA 5 mg/m<sup>3</sup> (highly refined)
- 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.  
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.
- 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. Respirator with combination filter for vapor/particulate Type A/P1 Warning ! filters have a limited use duration The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses None under normal use conditions

## Section 9. Physical and chemical properties and safety characteristics

### Appearance

Physical state	: Solid.
Color	: Not available.
Odor	: Characteristic.
Odor threshold	: Not available.
pH	: Not available.
Melting point/freezing point	: Not available.
Boiling point	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not available.
Vapor pressure	: Not available.
Vapor pressure 37.8°C (100°F)	: Not available.
Relative vapor density	: Not available.
Relative density	: 0.9
Solubility	: Insoluble in the following materials: cold water and hot water.
Solubility in water	: Insoluble
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.

## 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	: No specific data.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/substance	Result	Species	Dose	Exposure	Test
Distillates (petroleum), solvent-dewaxed light paraffinic	LC50 Inhalation Dusts and mists	Rat	5.1 mg/l	4 hours	-
	LD50 Dermal	Rabbit	2500 mg/kg	-	-
	LD50 Oral	Rat	>5000 mg/kg	-	-
Distillates (petroleum), hydrotreated heavy naphthenic	LC50 Inhalation Dusts and mists	Rat	5.54 mg/l	4 hours	OECD 403
	LD50 Dermal	Rabbit	2500 mg/kg	-	-
	LD50 Oral	Rat	>5000 mg/kg	-	-
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	LD50 Dermal	Rabbit	>20 g/kg	-	OECD 402 Acute Dermal Toxicity
	LD50 Oral	Rat	3.6 g/kg	-	-
	LD50 Oral	Rat	2500 mg/kg	-	OECD 401
calcium(2+) 12-hydroxyoctadecanoate	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-	OECD 402
	LD50 Oral	Rat - Female	>2000 mg/kg	-	OECD 420

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

#### Irritation/Corrosion

Product/substance	Result	Species	Score	Exposure	Test
calcium(2+) 12-hydroxyoctadecanoate	Eyes - Cornea opacity	Rabbit	0	-	OECD 405

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

**Eyes** : 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, eye irritation classification is not required

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

#### Sensitization

Product/substance	Route of exposure	Species	Result
calcium(2+) 12-hydroxyoctadecanoate	skin	Mouse	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



## Section 11. Toxicological information

Product/substance	Test	Experiment	Result
calcium(2+) 12-hydroxyoctadecanoate	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Negative
	OECD 473	Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic	Negative

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

### Carcinogenicity

Not available.

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

### Reproductive toxicity

Product/substance	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
calcium(2+) 12-hydroxyoctadecanoate	-	Negative	Negative	Rat - Male, Female	Dermal	-

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

### Teratogenicity

Not available.

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

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes mild skin irritation. Defatting to the skin.
- 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 or irritation  
watering  
redness
- Inhalation** : No specific data.

## Section 11. Toxicological information

- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : No specific data.

### 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
calcium(2+) 12-hydroxyoctadecanoate	Sub-chronic NOAEL Dermal	Rat - Male, Female	1000 mg/kg	-

- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : 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)
MULTIS MS 2	90070.2	8089.5	N/A	N/A	N/A
Distillates (petroleum), solvent-dewaxed light paraffinic	N/A	2500	N/A	N/A	5.1
Distillates (petroleum), hydrotreated heavy naphthenic	N/A	2500	N/A	N/A	5.54
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	3600	N/A	N/A	N/A	N/A
calcium(2+) 12-hydroxyoctadecanoate	2500	N/A	N/A	N/A	N/A

## Section 12. Ecological information

### Toxicity

Product/substance	Result	Species	Exposure	Test
Distillates (petroleum), solvent-dewaxed light paraffinic	Acute EC50 >100 mg/l	Algae - Pseudokirchnerella subcapitata	72 hours	OECD 201
	Acute EC50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Chronic NOEL 10 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
	Chronic NOEL >1000 mg/l	Fish - Oncorhynchus mykiss	28 days	-
Distillates (petroleum), hydrotreated heavy naphthenic	Acute EC50 >10000 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Chronic NOEC 10 mg/l	Daphnia - Daphnia magna	21 days	OECD 211
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	Acute EC50 10 mg/l	Daphnia - Daphnia magna	48 hours	OECD 202
	Acute LC50 32 mg/l	Algae - Scenedesmus subspicatus	72 hours	OECD 201
	Acute LC50 5.3 mg/l	Fish - Oncorhynchus mykiss	96 hours	OECD 203
calcium(2+) 12-hydroxyoctadecanoate	Acute NOEC 0.8 mg/l	Daphnia - Daphnia magna	21 days	-
	Acute EC50 161 mg/l	Algae	72 hours	-
	Acute EC50 >100 mg/l	Daphnia - Daphnia magna	48 hours	-

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum), solvent-dewaxed light paraffinic	-	-	Not readily
Distillates (petroleum), hydrotreated heavy naphthenic	-	-	Not readily
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	-	-	Not readily

### Bioaccumulative potential

Product/substance	LogK <sub>ow</sub>	BCF	Potential
Phosphorodithioic acid, mixed O,O-bis(iso-Bu and pentyl) esters, zinc salts	0.69	-	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)**

: Not available.

**Mobility in soil**

: Given its physical and chemical characteristics, the product has no soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited.

### 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 number	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 Annex II of MARPOL and the IBC Code** : 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.

## Section 15. Regulatory information

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: All components are listed or exempted.
<b>China</b>	: All components are listed or exempted.
<b>Europe</b>	: All components are listed or exempted.
<b>Japan</b>	: <b>Japan inventory (ENCS):</b> All components are listed or exempted. <b>Japan inventory (ISHL):</b> Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: At least one component is not listed.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: All components are listed or exempted.
<b>Viet Nam</b>	: Not determined.

## Section 16. Other information

### History

<b>Date of revision</b>	: 5/25/2021
<b>Date of previous revision</b>	: No previous validation
<b>Version</b>	: 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
SKIN CORROSION/IRRITATION - Category 3	Expert judgment

### Additional details on the supplier of the product

TOTAL BURKINA 1080, Avenue Kwame N'Krumah Ouagadougou / BURKINA	TOTAL CENTRAFRIQUE Avenue de l'Indépendance, BP 3295 Bangui / REPUBLIQUE CENTRAFRICAINE	TOTAL CONGO Rue de la corniche Brazzaville / CONGO	TOTAL EGYPT Corner St. 254 & 206, Degla, Maadi. Cairo, 11431 / EGYPT
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## Section 16. Other information

TOTAL ETHIOPIA B & B building, behind AU head Quarter Addis-Abeba / ETHIOPIA	TOTAL GUINEA ECUATORIAL Malabo II / GUINEA	TOTAL KENYA PLC Regal Plaza, 6th Avenue Limuru Road P.O. Box 30736, 00100 GPO Nairobi / KENYA	TOTAL LESOTHO (PTY) LTD Motoane Road, Industrial area Maseru / LESOTHO
TOTAL LIBERIA Clara town, Busrod Island Monrovia / LIBERIA	TOTAL MADAGASIKARA SA Immeuble Filaratra, Route des hydrocarbures Ankorondrano 101 Antananarivo / MADAGASCAR	TOTAL MALAWI LIMITED OffMasauko Chipembere Highway Maselema Limbe / MALAWI	TOTAL MALI Avenue Kasse Keita Bamako / MALI
TOTAL MARKETING GABON Quartier Glass Boulevard de la République Libreville / GABON	TOTAL 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	TOTAL MARKETING TCHAD Parc des hydrocarbures, route de mara N'Djamena / TCHAD	TOTAL MAROC 146, Bd. Zerktouni 20000 Casablanca / MAROC
TOTAL MAURITANIE E nord- Lot n°110 Nouakhott / MAURITANIE	TOTAL MAURITIUS Chaussée Tromelin, Quai D BP 1202 Port-Louis / MAURITIUS	TOTAL MOZAMBIQUE Av. Sociedade de Geografia n°83,Edificio Maryah - 5°andar unico Maputo / MOZAMBIQUE	TOTAL NAMIBIA (PTY) LTD 5 Otto Nitzsche Strasse, Klein Windhoek Windhoek / NAMIBIA
TOTAL NIGER Route de l'aéroport Niamey / NIGER	TOTAL PETROLEUM GHANA LTD 25 Liberia Road P.O. BOX GP553 Accra / GHANA	TOTAL RDC 652, Avenue Lt Colonel Likusa Gombe, Kinshasa / REPUBLIQUE DEMOCRATIQUE DU CONGO	TOTAL SENEGAL Route de l'aéroport, sur la station TOTAL Ngor BP 355 Dakar / SENEGAL
TOTAL SIERRA LEONE Total house, 41 Main motor Road, Brookfields Freetown / SIERRA LEONE	TOTAL SOUTH AFRICA (PTY) LTD Total House, 3 Biermann Avenue, Rosebank, 2196 P.O Box 579, Saxonwold 2132 / SOUTH AFRICA	TOTAL SWAZILAND (PTY) LTD King Sobhuza 2nd Avenue, Industrial sites Manzini / SWAZILAND	TOTAL TOGO 69 bd de la paix Lomé / TOGO
TOTAL TUNISIE Rue du Lac Huron 1053 Les Berges du Lac – Tunis / TUNISIE	TOTAL UGANDA Plot 4, eighte Street Indusrial Area Kampala / UGANDA	TOTAL Upstream Companies Plot 25, Trans Amadi Industrial Layout P.M.B 5160 and P.O Box 696, Port Harcourt NIGERIA +234(084)236310	TOTAL ZAMBIA Mungwi Road, Plot 1709 -A Industrial Area Lusaka / ZAMBIA
TOTAL ZIMBABWE Total house, 1 Auckland road - Southerton Harare / ZIMBABWE	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		

**References** : Not available.

 Indicates information that has changed from previously issued version.

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