SAFETY DATA SHEET

accordance with Annex II of Regulation (EC) No 1907/2006 and its amendment(s)

Product: **EKALAND™ TMTM C** Page: 1 / 10

SDS No.: 100039-100 (Version 4.0) Date 18.01.2021 (*Cancel and replace* : 26.08.2020)

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

1.1. Product identifier

Identification of the mixture: EKALAND™ TMTM C

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

Use of the Substance/Mixture :

Sector of use :	Product category :
TMTM - Formulation of masterbatches **SU 10:** Formulation	**PC19:** Intermediate
Manufacture of General Rubber Goods **SU11:** Manufacture of rubber products	**PC32:** Polymer preparations and compounds

1.3. Details of the supplier of the safety data sheet

Supplier

MLPC International
209, Avenue Charles Despiau
F-40370 RION-DES-LANDES, FRANCE
Telephone: + 33 (0) 5 58 57 02 00
E-mail address: http://www.mlpc-intl.com
fds@mlpc-intl.com

E-mail address : Exposure scenario reachsubstance@mlpc-intl.com

1.4. Emergency telephone number

+1-703-741-5970 CHEMTREC international emergency phone number (ARKEMA CCN830055)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008):
Oral: Acute toxicity, 4, H302
Skin sensitisation, 1, H317
Inhalation: Acute toxicity, 4, H332
Specific target organ toxicity - repeated exposure, 2, Liver, H373
Acute aquatic toxicity, 1, H400
Chronic aquatic toxicity, 2, H411

Additional information:
For the full text of the H, EUH-phrases mentioned in this Section, see Section 16.

2.2. Label elements

Label elements (REGULATION (EC) No 1272/2008):

Hazardous components which must be listed on the label:
tetramethylthiuram monosulphide

Hazard pictograms:

Signal word: **Warning**

Hazard statements:
H302 : Harmful if swallowed.
H317 : May cause an allergic skin reaction.
H332 : Harmful if inhaled.
H373 : May cause damage to organs through prolonged or repeated exposure.
H400 : Very toxic to aquatic life.
H411 : Toxic to aquatic life with long lasting effects.

Precautionary statements:
Prevention:
P273 : Avoid release to the environment.
P280 : Wear protective gloves/protective clothing/eye protection/face protection.
P260 : Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Response:
P314 : Get medical advice/ attention if you feel unwell.
P333 + P313 : If skin irritation or rash occurs: Get medical advice/ attention.
Disposal:
P501 : Dispose of contents or container to an approved waste disposal plant.

2.3. Other hazards : None.

Other:
Results of PBT and vPvB assessment : According to REACH regulation, annex XIII, this mixture contains no substance meeting PBT and vPvB criteria.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Chemical nature of the mixture[1]:
Mixture

Hazardous components (accordance with Annex II of Regulation (EC) No 1907/2006 and its amendment(s)) :

Chemical name[1] & REACH Registration Number[2]	EC-No.	CAS-No.	Concentration	Classification REGULATION (EC) No 1272/2008
Tetramethylthiuram monosulfide (01-2119980834-25) (N° ANNEX: 006-080-00-3)	202-605-7	97-74-5	>= 98 %	Acute Tox. 4 (Oral); H302 Acute Tox. 4 (Inhalation); H332 Skin Sens. 1; H317 STOT RE 2; H373 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor Acute = 1
Distillates (petroleum), hydrotreated light paraffinic (01-2119487077-29) (N° ANNEX: 649-468-00-3)	265-158-7	64742-55-8	1 - 2 %	Asp. Tox. 1; H304 Nota L: DMSO <3%

[1]: See chapter 14 for Proper Shipping Name
[2] :See the text of the regulation for applicable exceptions or provisions -

4. FIRST AID MEASURES

4.1. Description of necessary first-aid measures:

General advice:
Take off immediately all contaminated clothing.

Inhalation:
Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician.

Skin contact:
Wash off immediately with soap and plenty of water.

Eye contact:
Wash well-open eyes immediately, abundantly and thoroughly with water. Consult an ophthalmologist immediately.

Ingestion:
If swallowed, do not induce vomiting - seek medical advice.

Protection of first-aiders:
In case of insufficient ventilation, wear suitable respiratory equipment.

4.2. Most important symptoms/effects, acute and delayed:

Symptoms: More severe effects if alcohol is consumed.
Hazards: Harmful if swallowed. May cause an allergic skin reaction. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.

4.3. Indication of immediate medical attention and special treatment needed, if necessary: No data available.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water spray, Foam, Dry powder

Unsuitable extinguishing media: All other extinguishants

5.2. Special hazards arising from the substance or mixture:
Thermal decomposition gives :, Temperature exceeding 280 °C:
Sulphur oxides, Nitrogen oxides (NOx)

5.3. Advice for firefighters:

Specific methods:
Remove all sources of ignition. Suppress gases, fumes and/or dust with water spray jet.

Special protective actions for fire-fighters:
Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:
Avoid contact with skin and eyes and inhalation of dust.

6.2. Environmental precautions:
Do not let product enter drains. Do not contaminate surface water.

6.3. Methods and materials for containment and cleaning up:

Recovery:
Shovel or sweep up. Recover the product and place in a dry labelled container.

Elimination:
Destroy the product by incineration (in accordance with local and national regulations).

6.4. Reference to other sections: None.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

Technical measures/Precautions:
Storage and handling precautions applicable to products: Dust forming. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Provide water supplies, ocular fountains and showers near the point of use.

Safe handling advice:
In case of dust formation, wear a dust mask.

Hygiene measures:
General industrial hygiene practice. Avoid contact with skin, eyes and clothing. Avoid breathing dust.
Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities:
Keep in a well-ventilated place. Keep in a dry place. Store protected from moisture.

Incompatible products:
Strong acids Oxidizing agents

Packaging material:
Recommended: Paper bags, Big bags.

7.3. Specific end use(s): None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Exposure Limit Values (dust)

Source	Date	Value type	Value (ppm)	Value (mg/m3)	Remarks
ACGIH (US)	03 2014	TWA	–	3	Respirable particles.
ACGIH (US)	03 2014	TWA	–	10	Inhalable particles.

Exposure Limit Values Not relevant

Derived No Effect Level (DNEL): TETRAMETHYLTHIURAM MONOSULFIDE :

End Use	Inhalation	Ingestion	Skin contact
Workers	0,168 mg/m3 (LT, SE) 101,8 mg/m3 (ST, SE)		0,024 mg/kg (LT, SE)
Consumers	0,0416 mg/m3 (LT, SE) 69,2 mg/m3 (ST, SE)	0,012 mg/kg (LT, SE)	

LE : Local effects, **SE** : Systemic effects, **LT** : Long term, **ST** : Short term

Predicted No Effect Concentration: TETRAMETHYLTHIURAM MONOSULFIDE :

Compartment:	Value:
Water	0,122 µg/l
Marine water	0,012 µg/l
Sewage treatment plant	10 mg/l
Fresh water sediment	0,0045 mg/kg dw
Marine sediment	0,00045 mg/kg dw
Soil	0,0008 mg/kg dw
Water (Intermittent release)	3,2 µg/l

8.2. Exposure controls:

General protective measures: Ensure sufficient air exchange and/or exhaust in work areas

Personal protective equipment:

Respiratory protection: Effective dust mask
Hand protection: Impervious gloves
Eye/face protection: Tightly fitting safety goggles
Skin and body protection: At the workplace : Protective suit.

Environmental exposure controls: See chapter 6

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance:

Physical state (20°C): solid
Form: powder
Colour: yellow
Odour: slight
Olfactory threshold: No data available.
pH: Not applicable
Melting point/range : 106 - 110 °C (OECD Test Guideline 102)
Boiling range : Decomposes before boiling.
Flash point: No data available
Evaporation rate: No data available.
Flammability (solid, gas):

Flammability: Non flammable product (Method A10: Flammability (solids))

Vapour pressure: < 0,02 Pa , at 25 °C (calculated)

Vapour density:	No data available.
Density:	1,38 g/cm3 , at 20 °C Molten form
Bulk density:	Average 0,6 kg/m3 , at 20 °C
Water solubility:	308 mg/l at 25 °C (OECD Test Guideline 105)
Partition coefficient: n-octanol/water:	TETRAMETHYLTHIURAM MONOSULFIDE : log Kow : 1,7 , at 20 °C (OECD Test Guideline 107) THIRAM : log Kow : 1,8 - 2,1 (OECD Test Guideline 117)
Auto-ignition temperature:	No data available.
Decomposition temperature:	approx. 243 °C (A2 Method (D. 92/69/ECC))
Viscosity, kinematic:	Not applicable
Explosive properties:	
Explosivity:	Not explosive (A14 Method)
Oxidizing properties:	Not relevant (due to its chemical structure)

9.2. Other data:

Solubility in other solvents:	Soluble in: , Aromatic solvents
Surface tension:	70,2 mN/m at 20 °C / 900 mg/l (OECD Test Guideline 115)
pKA:	< 2 at 20 °C (OECD Test Guideline 112)
Molecular weight:	208,37 g/mol (Literature)

10. STABILITY AND REACTIVITY

10.1. Reactivity: No data available.

10.2. Chemical stability:
Product stable in the absence of moisture

10.3. Possibility of hazardous reactions: No data available.

10.4. Conditions to avoid:
Store protected from moisture and heat. Protect from light. Keep away from direct sunlight.

10.5. Incompatible materials to avoid: No data available.

10.6. Hazardous decomposition products:

Thermal decomposition:
Decomposition temperature: approx. 243 °C
Thermal decomposition gives :, Nitrogen oxides (NOx)
Nitrosamine

11. TOXICOLOGICAL INFORMATION

All available and relevant data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

11.1. Information on toxicological effects:

Acute toxicity:

Inhalation: **According to its composition : Harmful if inhaled.**

TETRAMETHYLTHIURAM MONOSULFIDE :
May be considered as comparable to a similar product for which experimental results are:

THIRAM :
• In animals : LC50/4 h/Rat: 4,42 mg/l (Aerosol)

Ingestion: **According to its composition : Harmful if swallowed. Use of alcoholic beverages when exposed to the product may result in adverse health effects (Antabuse effect)**

TETRAMETHYLTHIURAM MONOSULFIDE :
• In animals : LD50/Rat: 690 mg/kg (Method: OECD Test Guideline 401)

Dermal: **According to its composition, can be considered as Slightly or not harmful in contact with skin**

TETRAMETHYLTHIURAM MONOSULFIDE :

• In animals : No mortality/Rat: 2.000 mg/kg (Method: OECD Test Guideline 402), No specific toxic effects

Local effects (Corrosion / Irritation / Serious eye damage):

Skin contact: **According to its composition, can be considered as Non irritating to skin**

TETRAMETHYLTHIURAM MONOSULFIDE :
• In animals : No skin irritation (OECD Test Guideline 404, Rabbit)

Eye contact: **According to its composition, can be considered as Not irritating to the eyes.**

TETRAMETHYLTHIURAM MONOSULFIDE :
• In animals : No eye irritation (OECD Test Guideline 405, Rabbit)

Respiratory or skin sensitisation:

Inhalation: No data available.

Skin contact: **According to its composition : May cause an allergic skin reaction.**

TETRAMETHYLTHIURAM MONOSULFIDE :
• In man : Some cases of cutaneous sensitization reported
• In animals : Weak skin sensitizer (Method: Buehler Test, Guinea pig)

CMR effects :

Mutagenicity: **Results from in vitro and in vivo tests do not lead to considering the product as genotoxic**

In vitro

TETRAMETHYLTHIURAM MONOSULFIDE :
Ames test in vitro: Active (Method: OECD Test Guideline 471)
In vitro gene mutations test on mammalian cells: Inactive

In vivo

TETRAMETHYLTHIURAM MONOSULFIDE :
Chromosome aberration test in vivo: Inactive

Carcinogenicity: **Based on the available data, the substance is not suspected of having carcinogenic potential**

TETRAMETHYLTHIURAM MONOSULFIDE :
May be considered as comparable to a similar product for which experimental results are:

THIRAM :
• In animals : Absence of carcinogenic effects in animal (rat, dog, 2 years, By diet)

Reproductive toxicity:

Fertility: **Based on the available data, the substance is not suspected of having reprotoxic potential.**

TETRAMETHYLTHIURAM MONOSULFIDE :
May be considered as comparable to a similar product for which experimental results are:

THIRAM :
• In animals : Two generations study.: Absence of toxic effects on fertility, Effects on prenatal and postnatal growth.
NOAEL (Parental toxicity): 1,5 mg/kg bw/day
NOAEL (Fertility): 9 mg/kg bw/day
NOAEL (Developmental Toxicity): 3 mg/kg bw/day
(Rat, By diet)

Foetal development: **Based on the available data, the substance is not suspected of having developmental toxicity potential.**

TETRAMETHYLTHIURAM MONOSULFIDE :
May be considered as comparable to a similar product for which experimental results are:

THIRAM :
• In animals : Exposure during pregnancy
(Method: OECD Test Guideline 414, By oral route)
Toxic effects for foetal development, at doses that produce effects in mothers, No teratogenic effects
NOAEL (Developmental Toxicity): 15 mg/kg bw/day
NOAEL (Maternal Toxicity): < 7,5 mg/kg bw/day
(Rat)
Absence of toxic effects for foetal development
NOAEL (Developmental Toxicity): > 5 mg/kg bw/day
NOAEL (Maternal Toxicity): 2,5 mg/kg bw/day
(Rabbit)

Specific target organ toxicity :
Single exposure : No data available.

Repeated exposure: **The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.**
Exposure routes : Ingestion
Target Organs : Liver

TETRAMETHYLTHIURAM MONOSULFIDE :
May be considered as comparable to a similar product for which experimental results are:

THIRAM :

• In animals : By diet: Target organs: Stomach, Haematological system, NOAEL= 3,5 mg/kg (Rat, 3 months)

By diet: Target organs: Liver, Haematological system, NOAEL= 2 mg/kg (Dog, 3 months)
dermal route: Local irritation
NOAEL= 300 mg/kg (Rabbit, 3 Weeks)

Aspiration hazard:
Not applicable

12. ECOLOGICAL INFORMATION

Ecotoxicology Assessment: All available and relevant data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

According to available experimental data:

Acute aquatic toxicity : Very toxic to aquatic life.
Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

12.1. Acute toxicity :

Fish: **From its composition, it must be considered as: Toxic to fish.**

TETRAMETHYLTHIURAM MONOSULFIDE :
LC50, 96 h (Poecilia reticulata (guppy)) : 5,3 mg/l (Method: OECD Test Guideline 203)

THIRAM :
LC50, 96 h (Oncorhynchus mykiss) : 0,046 mg/l (Method: OECD Test Guideline 203)

Aquatic invertebrates: **From its composition, it must be considered as: Very toxic to daphnia.**

TETRAMETHYLTHIURAM MONOSULFIDE :
EC50, 48 h (Daphnia magna (Water flea)) : 2,9 mg/l (Method: OECD Test Guideline 202, Immobilization)

THIRAM :
EC50, 48 h (Daphnies (Daphnia Magna)) : 0,38 mg/l (Method: OECD Test Guideline 202, Immobilization)

Aquatic plants: **From its composition, it must be considered as: Very toxic to algae.**

TETRAMETHYLTHIURAM MONOSULFIDE :
ErC50, 72 h (Pseudokirchneriella subcapitata (green algae)) : 0,32 mg/l (Method: OECD Test Guideline 201, growth rate inhibition)

THIRAM :
EC50, 72 h (Selenastrum capricornutum (green algae)) : 0,12 mg/l (Method: OECD Test Guideline 201, growth rate inhibition)

Microorganisms:

TETRAMETHYLTHIURAM MONOSULFIDE :
NOEC, 28 d (Activated sludge) : 100 mg/l (Method: OECD Test Guideline 301D, Respiration inhibition)

THIRAM :
EC50, 3 h : 3,11 mg/l (Method: OECD Test Guideline 209, Respiration inhibition of activated sludge)

Aquatic toxicity / Long term toxicity:

Fish:

THIRAM :
NOEC, 33 d (Pimephales promelas) : 0,0046 mg/l (Method: OECD Test Guideline 210)

Aquatic invertebrates:

TETRAMETHYLTHIURAM MONOSULFIDE :
EC10, 21 d (Daphnia magna (Water flea)) : 0,006 mg/l (Method: OECD Test Guideline 211, Reproduction inhibition)

THIRAM :

NOEC, 21 d (Daphnia magna (Water flea)) : 0,040 mg/l (Method: OECD Test Guideline 211)

Aquatic plants:

TETRAMETHYLTHIURAM MONOSULFIDE :

ErC10, 72 d (Pseudokirchneriella subcapitata (microalgae)) : 0,14 mg/l (Method: OECD Test Guideline 201, growth rate inhibition)

Non aquatic toxicity / Acute toxicity :

Toxicity to soil dwelling organisms:

THIRAM :

LC50, 14 d (Eisenia fetida) : = 540 mg/kg (Soil dw) (Method: OECD Test Guideline 207)

12.2. Persistence and degradability :

Stability in water:

TETRAMETHYLTHIURAM MONOSULFIDE :

: Half-life: = 146 d at 25 °C and pH 4
: Half-life: = 184 d at 25 °C and pH 7
: Half-life: = 237 d at 25 °C and pH 9
Method: OECD Test Guideline 111

THIRAM :

Half-life: 68,5 d at 25 °C and pH 5
Half-life: 6,9 h at 25 °C and pH 9
Method: No information available.
Half-life: 3,5 d at 25 °C and pH 7

Biodegradation (In water): **All the products and/or components quoted in section 3 and/or analogue substances/metabolites are not readily biodegradable.**

TETRAMETHYLTHIURAM MONOSULFIDE :

Not readily biodegradable.: 0 % after 28 d (Method: OECD Test Guideline 301 F)

THIRAM :

Not readily biodegradable.: 40 % after 28 d (Method: OECD Test Guideline 301 D)

12.3. Bioaccumulative potential :

Bioaccumulation: **None of the product and /or component quoted in section 3 and/or analogue substance/metabolite is expected to bioaccumulate.**

TETRAMETHYLTHIURAM MONOSULFIDE :

Partition coefficient: n-octanol/water: log Kow : 1,7 , at 20 °C (Method: OECD Test Guideline 107)

THIRAM :

Partition coefficient: n-octanol/water: log Kow : 1,8 - 2,1 (Method: OECD Test Guideline 117)

12.4. Mobility in soil - Distribution among environmental compartments:

Vapor pressure: < 0,02 Pa, 25 °C, (Method: calculated)
Surface tension: 70,2 mN/m 20 °C /900 mg/l (Method: OECD Test Guideline 115)

12.5. Results of PBT and vPvB assessment :
According to REACH regulation, annex XIII, this mixture contains no substance meeting PBT and vPvB criteria.

12.6. Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment:

Disposal of product: Destroy the product by incineration (in accordance with local and national regulations).

Disposal of packaging: Destroy packaging by incineration at an approved waste disposal site (in accordance with local and national regulations).

14. TRANSPORT INFORMATION

Regulation	14.1. UN number	14.2.UN proper shipping name	14.3.Class*	Label	14.4. PG*	14.5. Environmental hazards	14.6. Special precautions for user
ADR	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TETRAMETHYLTHIURAM MONOSULFIDE)	9	9	III	yes	
ADN	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TETRAMETHYLTHIURAM MONOSULFIDE)	9	9	III	yes	
RID	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TETRAMETHYLTHIURAM MONOSULFIDE)	9	9	III	yes	
IATA Cargo	3077	Environmentally hazardous substance, solid, n.o.s. (Tetramethylthiuram monosulphide)	9	9MI	III	yes	
IATA Passenger	3077	Environmentally hazardous substance, solid, n.o.s. (Tetramethylthiuram monosulphide)	9	9MI	III	yes	
IMDG	3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TETRAMETHYLTHIURAM MONOSULFIDE)	9	9	III	Marine pollutant	EmS Number: F-A, S-F Mark: MP

*Description: 14.3. Transport hazard class(es)
14.4. Packing group

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

15. REGULATORY INFORMATION

Safety data sheets: accordance with Annex II of Regulation (EC) No 1907/2006 and its amendment(s)

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

Listed in:

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC): Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified [complex combination of hydrocarbons obtained by trea
EU. REACH, Annex XVII, Appendix 1, Entry 28 - Carcinogens: Category 1B (CLP Table 3 of Anx VI). (Reg. 1907/2006/EC): Distillates (petroleum), hydrotreated light paraffinic; Baseoil — unspecified [complex combination of hydrocarbons obtained by trea

15.2. Chemical safety assessment: None.

INVENTORIES:

EINECS:	Conforms to
TSCA:	Conforms to
DSL:	All components of this product are on the Canadian DSL
ENCS (JP):	Conforms to
ISHL (JP):	Conforms to
KECI (KR):	Conforms to
IECSC (CN):	Conforms to
PICCS (PH):	Conforms to
AICS:	Conforms to
NZIOC:	Conforms to

16. OTHER INFORMATION

Full text of H, EUH-phrases referred to under sections 2 and 3

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.

H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Update:

Safety datasheet sections which have been updated:		Type:
Exposure scenario	one or more exposure scenario have been changed: see dates and versions	Additions

Thesaurus:
NOAEL : No Observed Adverse Effect Level (NOAEL)
LOAEL : Lowest Observed Adverse Effect Level (LOAEL)
bw : Body weight
food : oral feed
dw : Dry weight
vPvB : very Persistent and very Bioaccumulative
PBT : Persistent, Bioaccumulative and Toxic

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).