#### BLACK BLEACHING POWDER THINK WHITE WITHPLEX code PD1810020NE

Rev00 del 08/01/2020

### SECTION 1: Identification of the substance or mixture and company/firm

#### 1.1 Identification of product

Commercial name: BLACK BLEACHING POWDER THINK WHITE WITH PLEX code PD1810020NE

#### 1.2 Relevant uses identified for the substance or mixture and contraindicated uses

Colour removing treatment for hair. Cosmetic product for professional use

#### 1,3 Information on the supplier of the schedule and safety data

Manufacturer: INDUSTRIE PAGODA SRL Address: Via Spallanzani 24/26 24061 Albano Sant'Alessandro (Bg) Telephone: +39.035.501116 Fax: +39.035.500894

Contacts: <a href="mailto:regulatory@industriepagoda.it">regulatory@industriepagoda.it</a>
1.4 Emergency telephone number

Milan Poisons Centre 02 66101029 (CAV Niguarda Ca' Granda Hospital -Milan) (H24)

#### **SECTION 2: Identification of hazards**

#### 2.1. Classification of substance or mixture

#### 2.1.1 Classification according to Regulation (EC) #1272/2008



Solid oxidiser Cat. 3 Attention H272: May intensify fire; oxidiser.

Irritant to the airways, Cat.1 Hazard H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Eye Dam. Cat.1 Hazard: H318: Causes serious eye damage Acute toxicity, Cat. 4 Attention H302: Harmful if swallowed. Skin Irrit.. Cat. 2 Attention H315: Causes skin irritation

Skin irritant, Cat. 1 Attention H317: May cause an allergic skin reaction. STOT SE 3, Cat.3 Attention H335: May cause respiratory irritation

# 2.2 Labelling elements









GHS08

GHS07 GHS05

# Warning: Hazard Hazard indications:

GHS03

H272 Can aggravate a fire: oxidiser

H302 Harmful ifingested

H318 Causes severe skin burns and eye damage.

H317 Can cause an allergic skin reaction

H334 Can cause allergic or asthma symptoms or difficulty breathing if inhaled.

H315 Causes skin irritation

# <u>Safety recommendations – Prevention:</u>

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P220 Keep/store away from clothing/combustible materials.
P221 Take any precaution to avoid mixing with combustibles
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

#### BLACK BLEACHING POWDER THINK WHITE WITH PLEX CODE PD 1810020NE

Rev00 del 08/01/2020

P264 Wash affected parts/clothing thoroughly after handling.
P270 Do no eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 In case of inadequate ventilation wear respiratory protection.

Safety recommendations - Reaction:

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for

breathing.

P301 +P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor

P305+P351+P338 IF IN EYES: Rinse cautiously with waterfor several minutes. Remove contact lenses, if present and easy to do.

Continue rising.

P310 Immediately call a POISON CENTER/doctor

P321 Specific treatments: see section 4 clause 4.1 of this safety schedule

P330 Rinse mouth.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTERor doctor/physician.

P370+P378 In case of fire, extinguish with suitable agents

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

Safety recommendations - Preservation:

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

P405 Store locked up. Safety recommendations – Disposal:

P501 Dispose of the product/vessel in accordance with local regulations.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Information not relevant

#### 3.2 Mixtures

Type of product and use: Cosmetic mixture for professional use

Hazardous components according to EEC Directive 67/548 and the CLP Regulation and associated classification.

<u>Substance</u>	<u>%</u>	CAS	<u>EINECS</u>	Hazard class (according to Reg. 1272/2008)
Potassium persulphate INCI: Potassium Persufate	25 – 50%	7727-21-1	231-781-8	Sol. Ox. 3H272 Acute Tox. 4H302 Eye Irrit. 2H319 STOT SE 3H335 Skin Irrit. 2H315 Resp. Sens. 1H334 Skin Sens. 1H317
Sodium Silicate INCI: Sodium Silicate	25 – 50%	1344-09-8	215-687-4	Eye Dam. 1 H318 STOT SE 3 H335 Skin Irrit. 2 H315 Eye Irrit. 2 H319

#### BLACK BLEACHING POWDER THINK WHITE WITH PLEX CODE PD 1810020NE

Rev00 del 08/01/2020

Ammonium Persulphate INCI: Ammonium Persulfate	10 – 25%	7727-54-0	231-786-5	Sol. Ox. 3H272 Acute Tox. 4H302 Eye Irrit. 2H319 STOT SE 3H335 Skin Irrit. 2H315 Resp. Sens. 1H334 Skin Sens. 1H317
Sodium Metasilicate INCI: Sodium Metasilicate	1 – 5%	6834-92-0	229-912-9	Skin Corr. 1B H314 STOTSE3 H335 Metal Corr. 1 H290
Sodium lauryl sulphate INCI: Sodium Lauryl Sulfate	1 – 5%	85586-07-8	287-809-4	Oral, Acute Tox. 4 H302 Skin Irrit. 2 H315 Eye Dam. 1 H318 Aquatic Chronic 3 H412
Mineral Oil INCI: Paraffinum Liquidum	0.1 - 1%	8042-47-5	232-455-8	Asp. Tox. 1 H304
Tetrasodium EDTA INCI: Tetrasodium EDTA	0.1 - 1%	64-02-8	200-573-9	Acute Tox. 4 H302; H332 Eye Dam. 1 H318 STOT RE 2 H373

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

<u>General instructions</u>: If in doubt or when symptoms persist, seek a doctor, keeping the compound's safety schedule available. Do not administer any substance orally to unconscious persons. Remove contaminated clothing immediately.

In case of inhalation: remove the casualty to the open air; if respiration stops or is difficult, perform artificial respiration. Call a doctor immediately.

<u>In case of contact with the skin</u>: remove contaminated clothing and take a shower. Call a doctor immediately. Wash the contaminated clothing separately before reusing.

In case of contact with the eyes: wash immediately and thoroughly with waterfor at least 15 minutes. If used, remove contact lenses. Consult a doctor immediately.

In case of ingestion: rinse the mouth thoroughly without swallowing. Call a doctor immediately.

#### 4.2 Main symptoms and effects, both acute and delayed

For symptoms and effects due to the content substances see chapter 11.

## 4.3 Indication of need to consult a doctor immediately and special treatments

Follow the doctor's instructions

# **SECTION 5: Fire prevention measures**

# 5.1 Fire extinguishers

#### 5.1.1 SUITABLE fire extinguishers

Suitable fire extinguishers are water, nebulised water, foam. Excess water or nebulised water must be used until completely extinguished.

#### 5.1.2 UNSUITABLE fire extinguishers

none in particular, even if some extinguishers (CO2-based powders, fluoride derivatives, sand, earth, etc) can be less active as the product contains oxidisers which feed combustion.

### 5.2 Special hazards deriving from the substance or mixture

#### Hazards due to exposure in case of fire

Avoid respirating combustion products. If involved in a fire the product can produce toxic ammonia gases, sulphur dioxide SO2 and (sulphurous anhydride) sulphur trioxide SO3 (sulphuric anhydride).

### 5.3 Fire extinguishing guidelines for employees

## General Information

In case of fire always don complete fire protection equipment.

#### Equipment

Protective helmet with visor, non-flammable clothing (non-flammable jacket and with bands around the arms, legs and waist), protective gloves (protective against fire, cuts and dielectric discharge), respirator (automatic breathing protection).

#### SECTION 6. Accidental spillage measures

# 6.1. Personal safety, protection devices and procedures in case of emergency.

Remove all sources of ignition (cigarettes, flames, sparks, etc.) from the area where the leakage occurred. Avoid inhaling the dust. Block the leakage if not dangerous to do so. Do not handle damaged containers or leaking product without having first

#### BLACK BLEACHING POWDER THINK WHITE WITHPLEX code PD1810020NE

Rev00 del 08/01/2020

donned the appropriate protection equipment. Remove all persons who are not equipped. For all information regarding risks to the environment and health, protection of the airways, ventilation and personal protection equipment, refer to the other sections of this schedule.

#### 6.2. Environmental precautions.

Prevent the product from entering sewers, surface waters, ground water and confined areas.

#### 6.3. Methods and materials for containment and for reinstatement.

Absorb the product with non-combustible material (sand, fabric, powder, aggregate, vermiculite) and place it in a container for removal according to local and national regulations.

#### 6.4. Reference to other sections.

Any information regarding personal protection and disposal is provided in section 8 and 13.

#### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling.

Do not smoke when handling and using. Avoid contact with the skin and eyes, inhalation of vapour and mist.

Neither eat nor drink during work.

Do not create dust while working with the product. Thorough operational removal of dust and ventilation/aspiration in work places. Adopt measures against electrostatic discharge.

#### 7.2. Conditions for safe storage, including any incompatibilities.

Locate in dry and aerated places. Avoid excessively high temperatures (over 30°C) Avoid contamination with reducing agents such as lotions, permanent or straightening. Do not store after having added other substances such as developers and lightening lotions (the containers could break). Avoid contact with moist organic materials, such as paper towels, wood, clothing, etc, avoid discarding product residues in the waste, spontaneous combustion could occur. **Protect from heat and the sun's rays; store away from rain and moisture and never outside.** 

#### 7.3. Final specific uses.

Information not available.

For transport, storage and handling, only use appropriate materials.

# SECTION 8: Control of exposure/personal protection

8.1. Control parameters

Potassium Persulfate: T.L.V.-T.W.A.(ACGIH 2003) 0.1mg/m<sup>3</sup>

<u>Ammonium Persulfate</u>: T.L.V.-T.W.A. 0.1mg/m<sup>3</sup>

Sodium Metasilicate:T.L.V.-T.W.A.(supplier) 10mg/m³Sodium silicate:T.L.V.-T.W.A.(supplier) 2mg/m³Mineral Oil:T.L.V.-T.W.A. (supplier) 5mg/m³

#### 8.2. Control of exposure

Considering that using the appropriate technical measures should always have priority over personal Protection equipment, ensure good ventilation in the work place via effective local aspiration or exhaust Air discharge.

# Protection of the hands

Protect the hands with category I work gloves (ref. Directive 89/686/EEC and standard EN 374) such as latex, PVC or equivalent. When deciding on the material for the work gloves, the following should be considered: degradation, breakage and permeation time. The resistance of the gloves should be verified before the use of compound products as it is not predictable. Gloves have a wear time that depends on the duration of exposure.

#### Protection of the skin

Don work clothes with long sleeves and safety footwear for professional use of category I (ref. Directive 89/686/EEC and standard EN 344). Wash with soap and water after having removed the protective clothing.

#### Respiratory protection

If exceeding the threshold value of one or more substances in the compound, refer to the daily exposure in the work environment or to a value set out by the company prevention and protection service, don a mask with type B or universal type filter of a class (1, 2 or 3) selected in relation to the usage concentration limit (ref. Standard EN 141). The use of equipment for protecting the respiratory system, such as paper masks for organic vapours and for dust/mist, is necessary in the absence of technical measures to limit the worker's exposure. The protection offered by masks is however limited. If the substance considered is odourless or its olfactory threshold exceeds the associated exposure limit and in the case of emergency, or when the exposure levels are unknown or the concentration of oxygen in the work environment is less than 17% in volume, don an open circuit compressed air respirator (ref. Standard EN 137) or external air respirator with complete mask, half mask or mouthpiece (ref. Standard EN 138).

#### Protection of the eyes

It is recommended to don hermetic protective eyewear (ref. Standard EN 166)

#### BLACK BLEACHING POWDER THINK WHITE WITHPLEX code PD1810020NE

Rev00 del 08/01/2020

#### SECTION 9: Physical and chemical properties

# 9.1. Information on the essential physical and chemical properties

Important data for safety Aspect: Homogenous powder

Colour: Black

Odour: Characteristic

PH (water solution): 9.50-10.50 Water solubility: partially soluble

Combustible properties: around 50% persulphates Vapour density: Information not available Decomposition temperature: data not available Auto-inflammability: data not available

Ignition point: data not available

Inflammability (solids, gases): data notavailable Lower explosion limit: data not available Upper explosion limit: data not available Explosive properties: data not available Vapour pressure (20° C): data not available Odour threshold: data not available Evaporation rate: data not available Oxidative properties: data not available

### SECTION 10: Stability and reactivity

10.1.

#### Reactivity.

The product does not decompose if used according to standards. The product is stable in safety conditions up to around 65°C; above this temperature it gradually begins to decay, releasing small quantities of oxygen and ammonia. Above 150°C the rate of decay becomes rapid and self-accelerating with the release of oxygen, which can lead to fire.

Humidity is an extremely important factor as uncontrolled and unstable humidity can lower the decay temperature considerably.

#### 10.2. Chemical stability.

See the above paragraph.

### 10.3. Potential for hazardous reactions.

See section 10.1.

### 10.4. Conditions to be avoided.

High temperatures, high humidity, electrostatic charges. Do not subject the product to friction and impacts.

#### 10.5. Incompatible materials.

Reducing agents (permanent lotions), acids, bases, metals, oxidisers and combustible materials

10.6. Products with hazardous decay.

Corrosive gases/vapours and toxic gases/vapours such as sulphur oxides (SOx), ammonia, nitrogen oxides (NOx) and ozone.

#### SECTION 11: Toxicological information

# 11.1. Information on the toxicological effects

Toxicological information regarding the mixture:

The finished product is a cosmetic and may not be subject to tests on animals. The data indicated refer to the hazardous raw materials contained within the product.

The product contains ingredients that could be harmful to health. These components are irritant to the skin and the mucous membranes of the eyes and the respiratory system. They could stimulate asthma attacks in sensitive individuals, could cause a sensitivity reaction in the skin and respiratory hypersensitisation.

Effects due to chronic exposure: this mixture has not been tested for the effects of chronic exposure according to the OHSA Hazard Communication Standard.

#### BLACK BLEACHING POWDER THINK WHITE WITH PLEX CODE PD 1810020NE

Rev00 del 08/01/2020

Target organs: skin, respiratory system.

Routes of ingress: inhalation, ingestion and the skin.

The general medical conditions, aggravated by exposure, will be related to the primary toxic (pharmacological) effect of the substance; any pre-existent dermatitis could deteriorate through the present of a skin irritant, as also bronchitis could be aggravated by the dust in the air.

Harmful for ingestion. Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Further information: the damage to health under normal use is unknown and unpredictable.

# 11.2 Toxicological information regarding the raw material content

Potassium Persulfate: LD50 rat, oral 700 mg/kg

rat, inhalation >2.95mg/l/4h

rat, cutaneous > 2000mg/Kg

Ammonium Persulfate: LD50 rat, oral 700 mg/kg

rat, inhalation >2.95mg/l/4h rat, cutaneous >2000mg/Kg

Sodium Metasilicate: LD50 rat, oral 1125mg/Kg
Tetrasodium EDTA: LD50 rat, oral 1780 – 2000mg/Kg

rat, oral 1780 – 2000mg/Kg Rat, inhalation 1-5 mg/l/6h

Sodium Lauryl Sulfate: LD50 rat, oral 300 – 2000 mg/Kg

Mineral OilLD50rat, oral >5000 mg/KgSodium Silicate:LD50rat, oral 300-2,000 mg/Kg

### SECTION 12: Ecological information

Use according to good working practices, avoiding discarding the product in the environment. Notify the competent authorities if the product has entered water courses or sewers or has contaminated the soil or vegetation.

# 12.1. Toxicity

N.A.

# 12.2. Persistance and degradability

N.A. The substance is biodegradable. Not persistent

### 12.3. Bioaccumulation potential

N.A. Does not bioaccumulate.

12.4. Soil mobility

N.A. No specific information is available on this product

#### 12.5. Results of PBT and vPvB evaluation

vPvB substances: Nil - PBT substances: None

### 12.6. Other adverse effects

None. No specific information is available on this product.

#### SECTION 13: Considerations on disposal

#### 13.1. Methods of waste treatment

Do not dispose the product together with domestic waste. Do not dispose in the sewers. Send to authorised disposal plants, refer to Legislative decree 22/97 as amended.

#### Packaging contaminants

Packaging contaminants must be sent for recycling or disposal according to the national waste management regulations.

#### SECTION 14. Information on transport

14.1 UN number

UN 3215

14.2 UN number shipment name

PERSULPHATES, INORGANIC NOS

14.3 Classes of hazard associated with transport

Road/rail transport (ADR/RID-GGVS/E)



#### BLACK BLEACHING POWDER THINK WHITE WITH PLEX CODE PD 1810020NE

Rev00 del 08/01/2020

- Class 5.1 substances with an inflammable effect

Packaging group

- Correct technical name: PERSULPHATES, INORGANIC, N.O.S. (Potassium persulfate and Ammonium persulfate)

<u>Exemptions from transport under ADR</u>: for limited quantities. Exemption from transport under ADR for the product packaged in a container less than 1 kg and secondary container less than 30 kg, up to 1 ton.

Maritime transport (IMO/IMDG)



- IMDG Class 5.1
- Packaging group III

– EmS numberF-A, S-Q

- Correct technical name: PERSULPHATES, INORGANIC, N.O.S. (Potassium persulfate and Ammonium persulfate)

Not marine polluting

# Air transport (ICAO-TI/IATA-DGR)



- ICAO/IATA Class 5.1 - Packaging group III

- Correct technical name PERSULPHATES, INORGANIC, N.O.S.(Potassium persulfate and Ammonium

persulfate)

# SECTION 15. Information on regulation

# 15.1 Standards and legislation on health, safety and environment specific to the substance or mixture National provisions

 $It aly: Legislative \ decree\ 81/2008\ (Consolidating\ text\ on\ health\ and\ safety\ in\ work\ places)\ as\ amended,\ and\ and\ safety\ in\ work\ places)$ 

Directive

2009/161/EU-chemical risk assessment pursuant to heading IX

Hazard classesfor water

Class: 1 Classification in accordance with VwVwS

Legislative decree no. 52 of 3/2/1997 (Classification, packaging and labelling of hazardous substances) Legislative decree no. 65 of 14/3/2003 (Classification, packaging and labelling of hazardous compounds) Legislative decree no. 81 of 9/4/2008

Decree of the Ministry of Labour of 26/02/2004 (Limits of working exposure)

Ministry Decree of 03/04/2007 (Enactment of directive no. 2006/8/EC)

International regulations

Directive 65/548/EEC (Classification, packaging and labelling of hazardous substances) as amended. Directive 1999/45/EC (Classification, packaging and labelling of hazardous substances) as amended. Regulation no. 1907/2006/EC (REACh). Regulation no. 1272/2008/EC (CLP).

Regulation no. 790/2009/EC (ATP1CLP amending, for adapting to technical and scientific progress, the ATP of the control of t

Regulation no. 1272/2008/EC).

Regulation (EU) no. 830/2015

Restrictions regarding the product or its content substances based on Annex XII of Regulation

(EC) 1907/2006 (REACH) as amended

Where applicable, reference is made to the following regulations:

Ministerial circulars 46 and 61 (Aromatic amines).

Legislative decree no. 238 of 21 September 2005 (Seveso III Directive)

#### BLACK BLEACHING POWDER THINK WHITE WITH PLEX CODE PD 1810020NE

Rev00 del 08/01/2020

EC Regulation no. 648/2004 (Detergents).

Decree law no. 152 of 3/4/2006 Environmental regulations

#### SECTION 16. Other information

#### Additional indications

Text of the Hazard recommendations (H) referred to in sections 2-3 of the schedule:

Sol. Ox. 3 Solid oxidiser, category 3

Met. Corr. 1 substance corrosive to metals, category 1

Acute Tox. 4 Acute toxicity, category 4

Asp. Tox. 1 Aspiration toxicity category 1

Skin Corr. 1B/Eve Dam. 1. skin corrosion/irritation, category 1

Skin Irrit. 2 Label elements for skin corrosion/irritation

Eye Dam. 1 serious eye damage, category 1

Skin Irrit. 2 Skin irritation, category 2

Skin Sens. 1 Skin sensitisation, category 1

Resp. Sens. 1 Respiratory sensitisation, category 1

STOT SE 3 Specific toxicity by target organ - single exposure, category 3

STOT RE 2 specific target organ toxicity after repeated exposure, category 2

Aguatic Chronic 3 long-term aguatic hazard, chronic 3

H272 Can aggravate a fire; oxidiser.

H290 May be corrosive to metals

H302 Harmful if ingested.

H304 May be fatal if swallowed and enters airways

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation, Category 2

H317 Can cause an allergic skin reaction.

H318 Causes serious eye damage

H319 Causes severe eye irritation.

H332 Harmful if inhaled

H334 Can cause allergic or asthma symptoms or difficulty breathing if inhaled.

H335 Can irritate the airways.

H373 May cause damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects

## **GENERAL BIBLIOGRAPHY:**

- 1. Directive 1999/45/EC as amended
- 2. Directive 67/548/EEC as amended
- 3. Regulation (EC) 1907/2006 of the European Parliament (REACH)
- 4. Regulation (EC) 1272/2008 of the European Parliament (CLP)
- 5. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
- 6. Regulation (EC) 830/2015 of the European Parliament
- 7. The Merck Index.Ed. 10
- 8. Handling Chemical Safety
- 9. Niosh Registry of Toxic Effects of Chemical Substances
- 10. INRS Fiche Toxicologique
- 11. Patty Industrial Hygieneand Toxicology
- 12. N.I. Sax Dangerous properties of Industrial Materials-7 Ed., 1989

This document has been drafted by a technician with competence on SDS, who has been given adequate training. The user's working conditions are unknown and not under our control. The user is responsible for observing all the necessary legal provisions.

Primary bibliographic sources:

ECDIN-Environmental Chemicals Data and Information Network-Joint Research Centre,

Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

PD1810020NE -Rev00

8

#### BLACK BLEACHING POWDER THINK WHITE WITHPLEX code PD1810020NE

Rev00 del 08/01/2020

CCNL - Annex 1

Upper Health Institute - National Inventory of Chemical Substances

The information contained herein is based on our knowledge as at the above reported date. We refer solely to the products indicated and they do not form a guarantee of specific quality. The user is required to verify the suitability and completeness of the information in relation to the specific use.

This schedule cancels and replaces any previous edition.

KEY

ADR: Accord européen relative au transport international des marchandises dangereuses par route (European accord on international transport of hazardous goods by road)

ASTM: ASTM International, originally known as the American Society for Testing and Materials (ASTM)

EINECS: European Inventory of Existing Commercial Chemical Substances

EC(0/50/100): Effective Concentration 0/50/100 (Effective maximum concentration per 0/50/100% of individuals)

LC(0/50/100): Lethal Concentration 0/50/100 (Lethal concentration per 0/50/100% of individuals)

IC50: Inhibitor Concentration 50 (Inhibiting concentration per 50% of individuals)

NOEL: No Observed Effect Level

NOEC: No Observed Effect Concentration

LOEC: Lowest Observed Effect Concentration (Maximum concentration at which it is possible to observe an effect)

DNEL: Derived No Effect Level

DMEL: Derived Minimum Effect Level CLP: Classification, Labelling and Packaging

CSR: Chemical Safety Report

LD (0/50/100): Lethal Dose 0/50/100 (Lethal dose per 0/50/100% of individuals)

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

IMDG code: International Maritime Dangerous Goods code

PBT: Persistent, bioaccumulative and toxic

RID: Règlement concernent le transport International ferroviaire des marchandises Dangereuses (Regulation on international transport of dangerous goods by rail)

STEL: Short term exposure limit TLV: Threshold limit value TWA: Time Weighted Average

UE: European Union

vPvB: Very persistent very bioaccumulative

N.A.: Not available N.A. Not applicable

VwVwS.: Text of Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard

Classes (Verwaltungsvorschrift wassergefährdende Stoffe – VwVwS)

PNEC: Predicted No Effect Concentration

PNOS: Particulates not Otherwise Specified BOD: Biochemical Oxygen Demand

COD: Chemical Oxygen Demand BCF: BioConcentration Factor

TRGS: Technische Regeln für Gefahrstoffe -Technical Rules for Hazardous Substances, defined by The Federal

Institute for Occupational Safety and Health, Germany LCLo: Lethal Concentration Low (minimum lethal concentration)

ThOD: Theoretical Oxygen Demand

The data are provided based on our current knowledge, they do not however represent any guarantee of the product's specifications and do not form any legal contractual relationship:

# Note for the user:

The information contained in this schedule is based on the knowledge available to us as at the date of the latest version. The user must verify the suitability and completeness of the information in relation to the specific use of the product.

This document must not be interpreted as a guarantee of any specific product property.

As the product is not used under our direct control, the user is obliged to observe, under his/her own responsibility, the laws and provisions on health and safety in force. We will not accept any liability for improper use.