ORAPI

ORABOND 125 - 125

Date: 14/06/2017 Page 1/11 Revision: N°9 (14/06/2017)

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: ORABOND 125

Product code: 125.

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

Putty

Professional use

1.3. Details of the supplier of the safety data sheet

Registered company name: ORAPI.

Address: PARC INDUSTRIEL DE LA PLAINE DE L'AIN - 225 ALLEE DES CEDRES.01150.SAINT-VULBAS.FRANCE.

Telephone: 33-(0)4-74-40-20-20. Fax: 33-(0)4-74-40-20-21.

fds@orapi.com

1.4. Emergency telephone number: 33-(0)1-45-42-59-59.

Association/Organisation: INRS.

Other emergency numbers

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

May produce an allergic reaction (EUH208).

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Additional labeling:

EUH208 Contains TIN, DIOCTYLBIS(2,4-PENTANEDIONATO-KO2,KO4)-. May produce an allergic reaction.

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P273 Avoid release to the environment.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Composition:			
Identification	(EC) 1272/2008	Note	%
EC: 932-078-5	GHS08		2.5 <= x % < 10
REACH: 01-2119552497-29	Dgr		
	Asp. Tox. 1, H304		
HYDROCARBONS, C13-C23, N-ALKANES,			
ISOALKANES, CYCLICS, < 0.03%			
AROMATICS			

Version: N°1 (14/06/2017)

ORAPI

ORABOND 125 - 125

Date: 14/06/2017 Page 2/11 Revision: N°9 (14/06/2017)

INDEX: 616-200-00-1		[2	$2.5 \le x \% < 10$
EC: 432-430-3	Aquatic Chronic 4, H413		
MIXTURE OF:			
N,N'-ETHANE-1,2-DIYLBIS(HEXANAMIDE)			
CAS: 2768-02-7	GHS07, GHS08, GHS02	2	2.5 <= x % < 10
EC: 220-449-8	Wng		
REACH: 01-2119513215-52	Flam. Liq. 3, H226		
	Acute Tox. 4, H332		
TRIMETHOXYVINYLSILANE	STOT RE 2, H373		
EC: 483-270-6	GHS07, GHS08	($0 \le x \% < 2.5$
REACH: 01-0000020199-67	Wng		
	Skin Sens. 1, H317		
TIN,	STOT SE 2, H371		
DIOCTYLBIS(2,4-PENTANEDIONATO-KO2,	STOT RE 2, H373		
KO4)-			
CAS: 63843-89-0	GHS07, GHS09, GHS08	($0 \le x \% < 2.5$
EC: 264-513-3	Dgr		
	Acute Tox. 4, H302		
BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)	STOT RE 1, H372		
[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDRO	Aquatic Acute 1, H400		
XYPHENYL]METHYL]BUTYLMALONATE	M Acute = 1		
	Aquatic Chronic 1, H410		
	M Chronic = 10		

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

In the event of an allergic reaction, seek medical attention.

Bring to the fresh air.

Consult a physician in case of disorder.

In the event of splashes or contact with eyes:

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any pain, redness or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

In the event of an allergic reaction, seek medical attention.

Remove clothing impregnated and wash carefully the skin with some water and some soap or use a known cleaner.

Consult a physician if irritation persists.

In the event of swallowing:

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use:

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder

ORAPI

ORABOND 125 - 125

Date: 14/06/2017 Page 3/11 Revision: N°9 (14/06/2017)

- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- hydrogen chloride (HCl)
- nitrous fumes

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid contact with skin and eyes.

Avoid inhalation of vapours.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention:

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area

Keep the container away from heat, bad weather, dampness and freezing.

Version: N°1 (14/06/2017)

ORAPI

ORABOND 125 - 125

Date: 14/06/2017 Page 4/11 Revision: N°9 (14/06/2017)

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No data available.

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)

[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]METHYL]BUTYLMALONATE (CAS: 63843-89-0)

Final use:Exposure method:
Workers.
Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 0.07 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 0.05 mg of substance/m3

Final use: Consumers.

Exposure method: Ingestion.

 $\begin{array}{ll} \mbox{Potential health effects:} & \mbox{Long term systemic effects.} \\ \mbox{DNEL:} & \mbox{3 $\mu g/kg$ body weight/day} \end{array}$

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects. DNEL: $33 \mu g/kg$ body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects. DNEL: 0.01 mg of substance/m3

TIN, DIOCTYLBIS(2,4-PENTANEDIONATO-KO2,KO4)-

Final use:Exposure method:
Workers.
Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 0.07 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.
DNEL: 84 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term systemic effects.
DNEL: 84 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term local effects.

DNEL: 0.091 mg of substance/m3

TRIMETHOXYVINYLSILANE (CAS: 2768-02-7)

Final use:Exposure method:
Workers.
Dermal contact.

Potential health effects: Long term systemic effects.
DNEL: 0.2 mg/kg body weight/day

Version: N°1 (14/06/2017)

ORAPI

ORABOND 125 - 125

Date: 14/06/2017 Page 5/11 Revision: N°9 (14/06/2017)

Exposure method: Dermal contact.

Potential health effects: Short term systemic effects.

DNEL: 0.2 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects. DNEL: 2.6 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term systemic effects. DNEL: 2.6 mg of substance/m3

Final use: Consumers.

Exposure method: Ingestion.

Potential health effects: Long term systemic effects.

DNEL: 0.1 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 0.1 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Short term systemic effects.

DNEL: 0.1 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects. DNEL: 0.7 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term systemic effects. DNEL: 0.7 mg of substance/m3

Predicted no effect concentration (PNEC):

BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)

[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]METHYL]BUTYLMALONATE (CAS: 63843-89-0)

Environmental compartment: Soil. PNEC: 1 mg/kg

 $\begin{array}{ll} \mbox{Environmental compartment:} & \mbox{Fresh water.} \\ \mbox{PNEC:} & \mbox{0 mg/l} \end{array}$

Environmental compartment: Sea water. PNEC: 0 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 0.61 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 504.4 mg/kg

Environmental compartment: Marine sediment. PNEC: 50.44 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 1 mg/l

TIN, DIOCTYLBIS(2,4-PENTANEDIONATO-KO2,KO4)-

Environmental compartment: Soil.

Version: N°1 (14/06/2017)

ORAPI

ORABOND 125 - 125

Date: 14/06/2017 Page 6/11 Revision: N°9 (14/06/2017)

PNEC: 0.0158 mg/kg

Environmental compartment: Fresh water. PNEC: 0.026 mg/l

Environmental compartment: Sea water. PNEC: 0.0026 mg/l

Environmental compartment: Intermittent waste water.

PNEC: 0.26 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 0.155 mg/kg

Environmental compartment: Marine sediment. PNEC: 0.0155 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 1 mg/l

TRIMETHOXYVINYLSILANE (CAS: 2768-02-7)

Environmental compartment: Soil.
PNEC: 0.055 mg/kg

Environmental compartment: Fresh water. PNEC: 0.36 mg/l

Environmental compartment: Sea water. PNEC: 0.036 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 1.3 mg/kg

Environmental compartment: Marine sediment. PNEC: 0.13 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 6.6 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended:

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVA (Polyvinyl alcohol)

Recommended properties:

- Impervious gloves in accordance with standard EN374

Version: N°1 (14/06/2017)

ORAPI

ORABOND 125 - 125

Date: 14/06/2017 Page 7/11 Revision: N°9 (14/06/2017)

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state: Paste.

Important health, safety and environmental information

Not relevant. Boiling point/boiling range: Not relevant. Flash point interval: Not relevant. Vapour pressure (50°C): Not relevant. 1.4 (20°C) Density: Water solubility: Insoluble. Not relevant. Melting point/melting range: Self-ignition temperature: Not relevant. Decomposition point/decomposition range: Not relevant. % VOC: < 4.7

9.2. Other information

Colour: white Flash point : >240°C

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Avoid:

- flames and hot surfaces
- heat

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)
- hydrogen chloride (HCl)
- nitrous fumes

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Splashes in the eyes may cause irritation and reversible damage

11.1.1. Substances

Acute toxicity :

BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)

[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]METHYL]BUTYLMALONATE (CAS: 63843-89-0)

Version: N°1 (14/06/2017)

ORAPI

Revision : N°9 (14/06/2017)

Date: 14/06/2017 Page 8/11

ORABOND 125 - 125

Oral route : LD50 = 1490 mg/kg

Species: Rat

Dermal route : LD50 > 3170 mg/kg

Species: Rat

Inhalation route (n/a): LC50 > 460 mg/m3

Species: Rat

TIN, DIOCTYLBIS(2,4-PENTANEDIONATO-KO2,KO4)-

Oral route: LD50 = 2500 mg/kg

Species: Rat

OECD Guideline 423 (Acute Oral toxicityAcute Toxic Class Method)

Inhalation route (n/a): LC50 1224

TRIMETHOXYVINYLSILANE (CAS: 2768-02-7)

Oral route: LD50 = 7120 mg/kg

Species: Rat

Dermal route : LD50 = 3259 mg/kg

Species : Rabbit

Inhalation route (n/a): LC50 = 16.81 mg/l

Species: Rat

Specific target organ systemic toxicity - repeated exposure :

BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)

[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]METHYL]BUTYLMALONATE (CAS: 63843-89-0)

Oral route : C = 10 mg/kg bodyweight/day

Species: Rat

Duration of exposure: 28 days

11.1.2. Mixture

Respiratory or skin sensitisation:

Contains at least one sensitising substance. May cause an allergic reaction.

SECTION 12: ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)

[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]METHYL]BUTYLMALONATE~(CAS:~63843-89-0)

Fish toxicity: LC50 > 100 mg/l

Species : Danio rerio Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity: NOEC = 0.002 mg/l

Factor M = 10

Species : Daphnia magna Duration of exposure : 21 days

OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity: ECr50 = 61 mg/l

 $Species: Scene desmus \ subspicatus$

Version: N°1 (14/06/2017)

ORAPI

Revision : N°9 (14/06/2017)

Date: 14/06/2017 Page 9/11

ORABOND 125 - 125

TIN, DIOCTYLBIS(2,4-PENTANEDIONATO-KO2,KO4)-

Fish toxicity: LC50 = 86 mg/l

Duration of exposure: 96 h

Duration of exposure: 72 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity: EC50 = 58.6 mg/l

Species : Daphnia magna Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity: ECr50 = 300 mg/l

Species: Scenedesmus subspicatus

Duration of exposure: 24 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

TRIMETHOXYVINYLSILANE (CAS: 2768-02-7)

Fish toxicity: LC50 = 191 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

Crustacean toxicity: EC50 = 168.7 mg/l

Species : Daphnia magna Duration of exposure : 48 h

NOEC = 28.1 mg/l Species : Daphnia magna Duration of exposure : 21 days

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

BIS(1,2,2,6,6-PENTAMETHYL-4-PIPERIDYL)

[[3,5-BIS(1,1-DIMETHYLETHYL)-4-HYDROXYPHENYL]METHYL]BUTYLMALONATE~(CAS:~63843-89-0)

Biodegradability: Non-rapidly degradable.

TIN, DIOCTYLBIS (2,4-PENTANEDIONATO-KO2,KO4)-

Biodegradability: Non-rapidly degradable.

TRIMETHOXYVINYLSILANE (CAS: 2768-02-7)

Biodegradability: no degradability data is available, the substance is considered as not degrading

quickly.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

Version: N°1 (14/06/2017)

ORAPI

ORABOND 125 - 125

Date : 14/06/2017 Page 10/11 Revision : N°9 (14/06/2017)

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

_

14.4. Packing group

_

14.5. Environmental hazards

-

14.6. Special precautions for user

-

SECTION 15: REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2016/1179. (ATP 9)

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.

Version: N°1 (14/06/2017)

ORAPI

ORABOND 125 - 125

Date: 14/06/2017 Page 11/11 Revision: N°9 (14/06/2017)

H371 May cause damage to organs .
H372 Causes damage to organs through prolonged or repeated exposure .
H373 May cause damage to organs through prolonged or repeated exposure .
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H413 May cause long lasting harmful effects to aquatic life.

Abbreviations:

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefahrdungsklasse (Water Hazard Class).

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.