



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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



1.1. Product identifier

Product name : OWATROL RENOCLEAR

Product code : owrenoclear.

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

Traitement de surface

1.3. Details of the supplier of the safety data sheet

Registered company name : DURIEU S.A.: Siège Social.

Address : 2 bis, rue Charles de Gaulle.91070.BONDOUFLE.FRANCE.

Telephone : + 33 (0)1.60.86.48.70. Fax : + 33 (0)1.60.86.84.84.

reglementaire@durieu.com

www.durieu.com

1.4. Emergency telephone number : + 33 (0)1.45.42.59.59.

Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.

Other emergency numbers

UNITED KINGDOM :UK National poisons emergency number: +44 (0) 870 600 6266 IRELAND, EIRE:Ireland National Poisons Information

Centre: +353 (0) 1 8379964

SECTION 2 : HAZARDS IDENTIFICATION



2.1. Classification of the substance or mixture

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

Substance that is corrosive to metals, Category 1 (Met. Corr. 1, H290).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Contact with acids liberates very toxic gas (EUH032).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Detergent mixture (see section 15).



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

Hazard pictograms :



GHS05

Signal Word :

DANGER

Product identifiers :

EC 231-836-6

SODIUM CHLORITE

Additional labeling :

EUH206

Warning! Do not use together with other products. May release dangerous gases (chlorine).

Hazard statements :

H290

May be corrosive to metals.

H318

Causes serious eye damage.

EUH032

Contact with acids liberates very toxic gas.

Precautionary statements - General :

P101

If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Precautionary statements - Prevention :

P280 Wear protective gloves / protective clothing / eye protection / face protection.

Precautionary statements - Response :

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

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

Precautionary statements - Disposal :

P501 Dispose of empty container or unused container at the waste collection point or in household waste in accordance with local regulations.

2.3. Other hazards

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

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

The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	Classification (EC) 1272/2008	Note	%
INDEX: PCP166 CAS: 7758-19-2 EC: 231-836-6 REACH: 01-2119529240-51-XXXX SODIUM CHLORITE	GHS06, GHS05, GHS09, GHS08, GHS03 Dgr Ox. Liq. 1, H271 Met. Corr. 1, H290 Acute Tox. 3, H301 Acute Tox. 2, H310 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Chronic 3, H412 Aquatic Acute 1, H400 M Acute = 1 EUH:032-071		$2.5 \leq x \% < 10$
INDEX: 068 CAS: 104-76-7 EC: 203-234-3 REACH: 01-2119487289-20-XXXX ETHYLHEXANOL	GHS07 Wng Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335	[1]	$0 \leq x \% < 0.1$

Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: PCP166 CAS: 7758-19-2 EC: 231-836-6 REACH: 01-2119529240-51-XXXX SODIUM CHLORITE		oral: ATE = 284 mg/kg BW

Information on ingredients :

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

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 splashes or contact with eyes :

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

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of swallowing :

Seek medical attention, showing 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

Ce produit n'est pas classé comme inflammable.

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
- carbon dioxide (CO₂)
- dry chemical agents
- water with AFFF (Aqueous Film Forming Foam) additive
- dry sand

Unsuitable methods of extinction

In the event of a fire, do not use :

- jets d'eau directs

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 :

- chlorine (Cl₂)
- carbon monoxide (CO)
- carbon dioxide (CO₂)

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 any contact with the skin and eyes.

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

Neutralise with an acidic decontaminant.

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.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

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.

Avoid eye contact with this mixture at all times.

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 out of reach of children.

Packaging

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

Recommended types of packaging :

- Vats

- Drums

Suitable packaging materials :

- Plastic

Unsuitable packaging materials :

- Steel

- Metal

- Iron

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Occupational exposure limits :**

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :	
104-76-7	5.4	1	-	-	-	

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
104-76-7	1	5.4	-	-	-	84

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :	
104-76-7	1 ppm 5.4 mg/m3					

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 with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

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 :

- Natural latex
- PVC (polyvinyl chloride)

- Body protection

Suitable type of protective clothing :

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

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.

- Respiratory protection

Type of FFP mask :

Wear a disposable half-mask aerosol filter in accordance with standard EN149/A1.

Category :

- FFP2

Type of mask with combined filters :

Wear a mask in accordance with standard EN136.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- B1 (Grey)

Particle filter according to standard EN143 :

- P2 (White)

Independent breathing apparatus for respiratory protection :

- Self-contained open-circuit compressed air independent breathing apparatus, with full mask in accordance with standard EN137.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state :	Fluid liquid.
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Colour

Unspecified

Odour

Odour threshold :	Not stated.
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Melting point

Melting point/melting range :	0 °C.
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Freezing point

Freezing point / Freezing range :	Not stated.
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Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	106
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Flammability

Flammability (solid, gas) :	Not stated.
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Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
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Explosive properties, upper explosivity limit (%) :	Not stated.
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Flash point

Flash point interval :	Not relevant.
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Auto-ignition temperature

Self-ignition temperature :	Not relevant.
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Decomposition temperature

Decomposition point/decomposition range :	Not relevant.
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pH

pH (aqueous solution) :	Not stated.
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pH :	11.50 .
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	Strongly basic.
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Kinematic viscosity

Viscosity :	1.9 mPa.s
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Solubility

Water solubility :	Soluble.
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Fat solubility :	Not stated.
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Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water :	Not stated.
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Vapour pressure

Vapour pressure (50°C) :	Not relevant.
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Density and/or relative density

Density :	> 1
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Relative vapour density

Vapour density :	Not stated.
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Particle characteristics

The mixture does not contain nanoforms.

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY**10.1. Reactivity**

This mixture reacts with acids, releasing very toxic gases in dangerous quantities.
Mixture which by chemical action can corrode and even destroy metals.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid :

- frost
- heating
- heat

10.5. Incompatible materials

Keep away from :

- acids
- combustible material

Releases a highly toxic gas when in contact with acids.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- chlorine (Cl₂)
- carbon monoxide (CO)
- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

11.1.1. Substances**Acute toxicity :**

SODIUM CHLORITE (CAS: 7758-19-2)

Oral route :

LD50 = 284 mg/kg bodyweight/day
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :

LD50 > 134 mg/kg bodyweight/day
Species : Rabbit
EPA OPP 81-2 (Acute Dermal Toxicity)

Skin corrosion/skin irritation :

SODIUM CHLORITE (CAS: 7758-19-2)

Corrosivity :

Causes severe skin burns.

Effect observed : Overall irritation score

Species : Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious damage to eyes/eye irritation :

SODIUM CHLORITE (CAS: 7758-19-2)

The substance produces at least in one animal effects on the cornea that are not expected to reverse or have not fully reversed within an observation period of normally 21 days.

Species : Rabbit

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

The substance produces at least in one animal effects on the iris that are not expected to reverse or have not fully reversed within an observation period of normally 21 days.

Species : Rabbit

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

The substance produces at least in one animal effects on the conjunctiva that are not expected to reverse or have not fully reversed within an observation period of normally 21 days.

Species : Rabbit

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

The substance produces at least in one animal effects on the conjunctiva that are not expected to reverse or have not fully reversed within an observation period of normally 21 days.

Species : Rabbit

OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitisation :

SODIUM CHLORITE (CAS: 7758-19-2)

Local lymph node stimulation test :

Non-Sensitiser.

Species : Others

OECD Guideline 406 (Skin Sensitisation)

11.1.2. Mixture

Acute toxicity :

Dermal route :

No observed effect.

2,000 < LD50 <= 5000 mg/kg

Skin corrosion/skin irritation :

Irritation :

No observed effect.

Average score < 1.5

Serious damage to eyes/eye irritation :

Causes serious eye damage.

Iritis :

Average score > 1.5

The risk of serious ocular lesions is based on the low/high pH and has been confirmed by tests.

11.2. Information on other hazards

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 7758-19-2 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

SODIUM CHLORITE (CAS: 7758-19-2)

Fish toxicity :

LC50 106 mg/l

Species : Oncorhynchus mykiss

Duration of exposure : 96 h

Crustacean toxicity :

EC50 < 1 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

Algae toxicity :

ECr50 = 5.33 mg/l

Duration of exposure : 96 h

NOEC = 0.62 mg/l

Duration of exposure : 96 h

OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

Aquatic plant toxicity :

Duration of exposure : 96 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

SODIUM CHLORITE (CAS: 7758-19-2)

Biodegradability :

Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

SODIUM CHLORITE (CAS: 7758-19-2)

Octanol/water partition coefficient :

log K_{ow} = -2.7

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

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, 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.

Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :

15 01 10 * packaging containing residues of or contaminated by dangerous substances

06 02 05 * other bases

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2023 [64]).

14.1. UN number or ID number

1908

14.2. UN proper shipping name

UN1908=CHLORITE SOLUTION

14.3. Transport hazard class(es)

- Classification :



8

14.4. Packing group

III

14.5. Environmental hazards

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14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C9	III	8	80	5 L	521	E1	3	E
IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation	
	8	-	III	5 L	F-A. S-B	223?274?352	E1	Category B	SGG5 SG6 SG8 SG10 SG12 SG20	
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	
	8	-	III	852	5 L	856	60 L	A3 A803	E1	
	8	-	III	Y841	1 L	-	-	A3 A803	E1	

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

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. 2022/692 (ATP 18)

Container information:

Packaging to be fitted with child-resistant fastenings (see EC Regulation No. 1272/2008, Annex II, Part 3).

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):

<https://echa.europa.eu/substances-restricted-under-reach>.

Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions :

No data available.

Labelling for detergents (EC Regulation No. 648/2004,907/2006) :

- less than 5 % : amphoteric surfactants

- 5 % or over but less than 15 % : chlorine-based bleaching agents

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 :

H271	May cause fire or explosion; strong oxidiser.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure .
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.
EUH071	Corrosive to the respiratory tract.



Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

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 : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.