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CATALYSEUR MA2 / MA2+ - 04009/04040

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: CATALYSEUR MA2 / MA2+

Product code: 04009/04040.

04040: KIT

04009: CATALYSEUR MA2+ / CATALYST MA2+ / HAERTER MA2+

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

Resin Catalyst

1.3. Details of the supplier of the safety data sheet

Registered company name: PRESI S.A.

Address: 11 Rue du vercors.38320.EYBENS.France.

Telephone: +33 (0)4.76.72.00.21. Fax: +33 (0)4.76.72.05.84.

presi@presi.com www.presi.com

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

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

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).

Acute dermal toxicity, Category 4 (Acute Tox. 4, H312).

Skin corrosion, Category 1B (Skin Corr. 1B, H314).

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

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

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.

Hazard pictograms:





GHS07

GHS05 Signal Word:

DANGER

Product identifiers:

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION EC 292-588-2

Hazard statements:

H302 + H312Harmful if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.



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Precautionary statements - Prevention:

P273 Avoid release to the environment.

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

Precautionary statements - Response:

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

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or

shower].

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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 - Storage:

P405 Store locked up.

Precautionary statements - Disposal:

P501 Dispose of contents/container to ...

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 fulfils 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:

Identification	(EC) 1272/2008	Note	0/0
CAS: 90640-67-8	GHS07, GHS05		50 <= x % < 100
EC: 292-588-2	Dgr		
REACH: 01-2119487919-13	Acute Tox. 4, H302		
	Acute Tox. 4, H312		
AMINES, POLYETHYLENEPOLY-,	Skin Corr. 1B, H314		
TRIETHYLENETETRAMINE FRACTION	Skin Sens. 1, H317		
	Eye Dam. 1, H318		
	Aquatic Chronic 3, H412		

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

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:

Move to fresh air

If symptoms persist, call a physician

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 splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

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

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

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In the event of swallowing:

Do not give the patient anything orally.

Seek medical attention immediately, showing the label.

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

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

Harmful if swallowed

Causes severe burns, harmful if contact with skin

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

Treat symptomatically. contact a physician.

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

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)
- nitrogen oxide (NO)

5.3. Advice for firefighters

In the event of fire, wear self-contained 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.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

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.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

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.



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Safe handling advice Avoid contact with skin and eyes

Technical measures / Precautions Provide sufficient air exchange and/or ventilation in work rooms

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.

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

Keep away from food, drink and animals feeding stuffs

Do not smoke

Store between 5°C and 40°C

Storage

Keep away from food and drink, including those for animals.

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.

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Final use: Workers.
Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 0.57 mg/kg body weight/day

Exposure method:

Potential health effects:

DNEL:

Dermal contact.

Long term local effects.

0.028 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term local effects.

DNEL: 0.028 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Short term systemic effects.
DNEL: 5380 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects. DNEL: 1 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 1 mg of substance/m3



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Final use: Consumers.

Exposure method: Ingestion. Potential health effects:

Short term systemic effects. 20 mg/kg body weight/day DNEL:

Exposure method: Ingestion.

Potential health effects: Long term systemic effects. 0.41 mg/kg body weight/day DNEL:

Exposure method: Ingestion.

Potential health effects: Short term systemic effects. DNEL: 20 mg/kg body weight/day

Exposure method: Ingestion.

Potential health effects: Short term systemic effects. DNEL: 0.41 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Short term systemic effects. DNEL: 8 mg/kg body weight/day

Exposure method: Dermal contact. Potential health effects: Short term local effects. DNEL: 1 mg of substance/cm2

Exposure method: Dermal contact. Potential health effects: Short term local effects. DNEL: 0.25 mg/kg body weight/day

Exposure method: Dermal contact. Potential health effects: Long term local effects. DNEL: 0.43 mg of substance/cm2

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects. DNEL: 0.57 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Short term systemic effects. DNEL: 8 mg/kg body weight/day

Exposure method: Dermal contact. Potential health effects: Short term local effects. DNEL: 1 mg of substance/cm2

Exposure method: Dermal contact.

Potential health effects: Short term local effects. DNEL: 0.25 mg/kg body weight/day

Exposure method: Dermal contact. Potential health effects: Long term local effects. DNEL: 0.43 mg of substance/cm2



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Exposure method: Inhalation.

Potential health effects: Short term systemic effects.

DNEL: 1600 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 0.29 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Short term systemic effects.
DNEL: 1600 mg of substance/m3

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 0.29 mg of substance/m3

Predicted no effect concentration (PNEC):

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Environmental compartment: Soil. PNEC: 19.1 mg/kg

Environmental compartment: Fresh water. PNEC : 190 μ g/l

 $\begin{array}{ll} \text{Environmental compartment:} & \text{Sea water.} \\ \text{PNEC:} & 38 \ \mu\text{g/l} \end{array}$

Environmental compartment: Intermittent waste water.

PNEC: $200 \mu g/l$

Environmental compartment: Fresh water sediment.

PNEC: 95.9 mg/kg

Environmental compartment: Marine sediment. PNEC: 19.2 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 4.25 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

 $Pictogram(s)\ indicating\ the\ obligation\ of\ wearing\ personal\ protective\ equipment\ (PPE):$







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



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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 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))
- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties:

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing:

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state: Fluid liquid.

Important health, safety and environmental information

pH: 13.00 .

Strongly basic.

Boiling point/boiling range: 274.6°c 118.00 °C. Flash Point: Explosive properties, lower explosivity limit (%): 1%

Explosive properties, upper explosivity limit (%): 3.6% Vapour pressure (50°C): Not relevant. 5.04 Vapour density:

Density: 0.971

Water solubility: Soluble. >1000 g/l

Partition coefficient: n-octanol/water: -2.65Viscosity: 10 - 20 mPa.s Melting point/melting range: <-20°C 325 °C. Self-ignition temperature:

Decomposition point/decomposition range: 200 °C.

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9.2. Other information

No data available.

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

No data available.

10.4. Conditions to avoid

Do not heat the open flame, fumes or expose to flame or any source of ignition

10.5. Incompatible materials

Keep away from:

- strong acids
- strong bases
- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- nitrogen oxide (NO)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Harmful if swallowed.

Harmful in contact with skin.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

May cause an allergic reaction by skin contact.

11.1.1. Substances

Acute toxicity:

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Oral route: LD50 = 1716.2 mg/kg

Species: Mouse

Dermal route : LD50 = 1465.4 mg/kg

Species: Rabbit

Skin corrosion/skin irritation:

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Corrosivity: Causes severe skin burns.

Species: Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious damage to eyes/eye irritation:

Irritating to eyes

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Respiratory or skin sensitisation:

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

OECD Guideline 406 (Skin Sensitisation)

Guinea Pig Maximisation Test (GMPT): Sensitiser.

Species: Guinea pig

OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Mutagenesis (in vivo): Negative.

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Mutagenesis (in vitro): Positive.

Species: Bacteria

OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Carcinogenicity:

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Carcinogenicity Test: Negative.

No carcinogenic effect. Species: Mouse

OECD Guideline 451 (Carcinogenicity Studies)

Specific target organ systemic toxicity - repeated exposure :

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Inhalation route: C 50

11.1.2. Mixture

No toxicological data available for the mixture.

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

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Fish toxicity: LC50 = 330 mg/l

Duration of exposure: 96 h

EPA OTS 797.1400 (Fish Acute Toxicity Test)

Crustacean toxicity: EC50 = 31.1 mg/l

Species : Daphnia magna Duration of exposure : 48 h

REACH Method C.2 (Acute Toxicity for Daphnia)

EC10 mg/l

Species: Daphnia sp.

Duration of exposure: 21 days

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)



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Algae toxicity: ECr50 = 20 mg/l

Duration of exposure: 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

Duration of exposure: 21 days

OECD Guideline 201 (Alga, Growth Inhibition Test)

NOEC < 2.5 mg/l

Duration of exposure: 72 h

OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

Fish toxicity: No observed effect.

LC50 = 570 mg/l

Duration of exposure : 96 h Duration of exposure : 24 h

12.2. Persistence and degradability

Not inherently biodegradable

12.2.1. Substances

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Chemical oxygen demand : DCO = 1.94 g/g

Biodegradability: Non-rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)

Octanol/water partition coefficient : log Koe = -2.65

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Non-persistent mixture.

Non bioaccumulable mixture.

Non toxic mixture.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws):

WGK 2: Hazardous for water.

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.

Respect the local and national regulations

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Soiled packaging:

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

Give to a certified disposal contractor.

Respect the local and national regulations

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

07 01 99 wastes not otherwise specified

16 05 08 * discarded organic chemicals consisting of or containing dangerous substances

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 2017 - IMDG 2016 - ICAO/IATA 2017).

14.1. UN number

2259

14.2. UN proper shipping name

UN2259=TRIETHYLENETETRAMINE

14.3. Transport hazard class(es)

- Classification:



8

14.4. Packing group

II

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	C7	II	8	80	1 L	-	E2	2	Е
IMDG	Class	2°Label	Pack or.	LO	EMS	Provis.	EO			

	8	-	II	1 L	F-A,S-B	-	E2		
	·								
IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	F

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	II	851	1 L	855	30 L	-	E2
	8	-	II	Y840	0.5 L	-	-	-	E2

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. Transport in bulk according to Annex II of Marpol and the IBC Code

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. 2018/669 (ATP 11)

- Container information:

No data available.

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- Particular provisions:

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws):

WGK 2: Hazardous for water.

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:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

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).

GHS05: Corrosion

GHS07 : Exclamation mark

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