

PERFORMA HW+

Revision nr 3

Dated 10/09/2019

ΕN

Printed on 10/09/2019

Page n. 1/12

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

U01630 Code:

Product name PERFORMA HW+

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

Intended use Water preparation and inhibitor for non-ferrous materials.

Uses advised against: Different uses than those intended.

1.3. Details of the supplier of the safety data sheet

CENTRO DISTRIBUZIONE UTENSILI SCPA Name

Via delle Gerole, 19 Full address District and Country 20867 CAPONAGO (MB)

ITALY

tel. +39 02 95746081 fax. + 39 02 95745182

e-mail address of the competent person responsible for the Safety Data Sheet

info@cdu.net

Product distribution by: Centro Distribuzione Utensili Scpa

1.4. Emergency telephone number

+39 02 95746081 during office hour 8.30-12.30 - 13.30-17.30. For urgent inquiries refer to

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Skin corrosion, category 1 H314 Causes severe skin burns and eye damage. Serious eye damage, category 1 H318 Causes serious eye damage.

Skin sensitization, category 1 H317 May cause an allergic skin reaction.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:





Signal words: **DANGER**

Hazard statements:

H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction.

Precautionary statements:

P261 Avoid breathing dust / fume / gas / mist / vapours / spray.

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



Revision nr. 3

Dated 10/09/2019

ΕN

Printed on 10/09/2019

Page n. 2/12

PERFORMA HW+

P301+P330+P331 P303+P361+P353 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P305+P351+P338

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P310 P333+P313 Immediately call a POISON CENTER / doctor if you feel unwell. If skin irritation or rash occurs: Get medical advice / attention.

Contains:

1-AMINOPROPAN-2-OL

1,2-BENZISOTHIAZOL-3(2H)-ONE 2-(2-AMINOETHOXY)ETHANOL

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification X = Conc. % Classification 1272/2008 (CLP)

EDETIC ACID

CAS 60-00-4 $20 \le x < 25$ Eye Irrit. 2 H319

EC 200-449-4

INDEX 607-429-00-8 Reg. no. 01-2119486399-18

1-AMINOPROPAN-2-OL

CAS 78-96-6 5 ≤ x < 7 Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318

EC 201-162-7

INDEX 603-082-00-1

Reg. no. 01-2119475331-43

2-(2-AMINOETHOXY)ETHANOL

CAS 929-06-6 1 ≤ x < 3 Skin Corr. 1 H314, Eye Dam. 1 H318

EC 213-195-4

INDEX -

Reg. no. 01-2119520701-52

1,2-BENZISOTHIAZOL-3(2H)-ONE

CAS 2634-33-5 1 ≤ x < 3 Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317,

Aquatic Acute 1 H400 M=1

EC 220-120-9

INDEX 613-088-00-6

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

IN CASE OF SKIN CONTACT: Remove immediately all contaminated clothing. GET MEDICAL ADVICE IMMEDIATELY. Remove contaminated clothing immediately and dispose of it safely. In case of contact with the skin, wash immediately with plenty of water and soap.

IN CASE OF CONTACT WITH EYES: In the event of contact with the eyes, rinse them with water for an appropriate period of time and keep the eyelids open, then immediately consult an ophthalmologist. Protect the uninjured eye.

IN CASE OF INGESTION: DO NOT induce vomiting.

IN CASE OF INHALATION: Remove victim to fresh air and keep him warm and at rest.

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

None.



PERFORMA HW+

Revision nr. 3 Dated 10/09/2019

Printed on 10/09/2019

Page n. 3/12

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

Information for the doctor: symptomatically treatment.

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not inhale explosion and combustion gases. Combustion produces heavy smoke.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

Retain contaminated washing water and eliminate it.

In the event of a gas leak or penetration of water courses, soil or sewage system, inform the responsible authorities.

Suitable material for collection: absorbent material, organic, sand.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 10

7.3. Specific end use(s)

Water preparation and inhibitor for non-ferrous materials.

ΕN



PERFORMA HW+

Revision nr. 3 Dated 10/09/2019 ΕN

Printed on 10/09/2019

Page n. 4/12

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:
DEU Deutschland

TRGS 900 (Fassung 31.1.2018 ber.) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte

Threshold Limit Value			1-AMINOPROI	PAN-2-OL				
Туре	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
MAK	DEU	5,8	2	11,6	4	INHAL	Aerosol	
Predicted no-effect concent	ration - PNEC							
Normal value in fresh water				0,0327	mg	ı/I		
Normal value in marine water				0,00327	mg	ı/I		
Normal value for fresh water sediment				0,177	mg	ı/kg		
Normal value for marine water sediment				0,0177	mg	ı/kg		
Normal value for water, intermittent release				0,327	mg	ı/I		
Normal value of STP microorganisms				3,3	mg/l			
Normal value for the terrestrial compartment				0,0161	mg/kg			
Health - Derived no-eff								
	Effects on con	sumers			Effects on wo	rkers		
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,67 mg/kg bw/d				
Inhalation				2,1 mg/m3				8,5 mg/m3
Threshold Limit Value Type	Country	TWA/8h		STEL/15min				
туре	Country		nnm	mg/m3	nnm			
AGW	DEU	mg/m3 0,87	0,2	0,87	0,2	INHAL		
MAK	DEU	0,87	0,2	0,87	0,2	INHAL		
Predicted no-effect concent		0,07	U,Z	0,01	0,2	11411/12		
Normal value in fresh water				0,202	mo	1/1		
Normal value in marine water				0,202	mg/l mg/l			
Normal value for fresh water sediment				0,0202				
Normal value for marine water sediment				0,943		ı/kg		
Normal value for marine water sediment Normal value for water, intermittent release				2,02		ı/kg		
					mg			
Normal value of STP microorganisms Normal value for the terrestrial compartment				28	mg/l mg/kg			
	·	MEI		0,0704	mg	pkg		
Health - Derived no-eff	Effects on con				Effects on wo	rkers		
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				4,4 mg/kg bw/d				
Inhalation				0,33 mg/m3				1,12 mg/m
Skin			0,019 mg/m3	4,4 mg/kg			0,032 mg/m3	7,3 mg/kg
				bw/d				bw/d

iforma

CENTRO DISTRIBUZIONE UTENSILI SCPA

PERFORMA HW+

Revision nr 3 Dated 10/09/2019

ΕN

Printed on 10/09/2019

Page n. 5/12

Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction. VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category III professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance liauid Colour amber Odour characteristic Odour threshold Not available рH 8.5

Melting point / freezing point Not available Initial boiling point Not available Boiling range Not available Flash point Not available **Evaporation Rate** Not available Not applicable Flammability of solids and gases Lower inflammability limit Not available Upper inflammability limit Not available Not available Lower explosive limit Upper explosive limit Not available Not available Vapour pressure Vapour density Not available Relative density 1,20 Kg/l

Solubility in water: soluble Partition coefficient: n-octanol/water Not available

Xforma

CENTRO DISTRIBUZIONE UTENSILI SCPA

Revision nr. 3 Dated 10/09/2019

Printed on 10/09/2019

ΕN

Page n. 6/12

PERFORMA HW+

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available

Explosive properties

Not available

Oxidising properties

Not available

9.2. Other information

VOC (Directive 2010/75/EC) : 6,90 % - 82,80 g/litre
VOC (volatile carbon) : 3,31 % - 39,69 g/litre

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

EDETIC ACID

The acid is less stable than its salts and tends to decarboxylate at over 150°C/302°F. It is an antioxidant, aqueous suspensions react with acids to develop CO2 from carbonates and hydrogen from metals.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

1-AMINOPROPAN-2-OL

May react with: isocyanates, oxidising agents, halogens, acid chlorides. Avoid contact with: acid anhydrides, acid chlorides.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

1-AMINOPROPAN-2-OL

Avoid exposure to: high temperatures, moisture.

10.5. Incompatible materials

1-AMINOPROPAN-2-OL

Incompatible with: strong acids, strong oxidising agents, halogenated organic substances. Avoid contact with: halogenated hydrocarbons. May corrode: metals, aluminium.

10.6. Hazardous decomposition products

EDETIC ACID

May develop: nitric oxide. 1-AMINOPROPAN-2-OL

May develop: nitric oxide, carbon oxides, nitrous gases.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information Information not available.

Information on likely routes of exposure

Xforma

CENTRO DISTRIBUZIONE UTENSILI SCPA

PERFORMA HW+

Revision nr. 3 Dated 10/09/2019 ΕN

Printed on 10/09/2019

Page n. 7/12

Information not available.

<u>Delayed and immediate effects as well as chronic effects from short and long-term exposure</u> Information not available.

Interactive effects

Information not available.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture: Not classified (no significant component)

LD50 (Oral) of the mixture: >2000 mg/kg LD50 (Dermal) of the mixture: >2000 mg/kg

EDETIC ACID

LD50 (Oral) 1658 mg/kg Rat

1-AMINOPROPAN-2-OL

LD50 (Oral) 2813 mg/kg Rat LD50 (Dermal) 1851 mg/kg Rabbit

2-(2-AMINOETHOXY)ETHANOL

LD50 (Oral) 3400 mg/kg Rat LD50 (Dermal) > 3000 mg/kg Rabbit

1,2-BENZISOTHIAZOL-3(2H)-ONE

LD50 (Oral) 1020 mg/kg bw Rat

SKIN CORROSION / IRRITATION

Corrosive for the skin.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage.

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class.

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class.

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class.

SECTION 12. Ecological information

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

****forma**

CENTRO DISTRIBUZIONE UTENSILI SCPA

Revision nr. 3 Dated 10/09/2019 ΕN

Printed on 10/09/2019

Page n. 8/12

PERFORMA HW+

12.1. Toxicity

1-AMINOPROPAN-2-OL

LC50 - for Fish > 215 mg/l/96h Leuciscus idus (DIN 38412) EC50 - for Crustacea 109 mg/l/48h Daphnia magna (OECD 202)

EC50 - for Algae / Aquatic Plants 32,7 mg/l/72h Scenedesmus subspicatus (OECD 201)

2-(2-AMINOETHOXY)ETHANOL

 LC50 - for Fish
 > 681 mg/l/96h

 EC50 - for Crustacea
 189 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 202 mg/l/72h

 Chronic NOEC for Algae / Aquatic Plants
 62,5 mg/l/72h

1,2-BENZISOTHIAZOL-3(2H)-ONE

LC50 - for Fish 10 mg/l/96h EC50 - for Crustacea 4,4 mg/l/48h

12.2. Persistence and degradability

EDETIC ACID

Solubility in water 400 mg/l

Entirely degradable

1-AMINOPROPAN-2-OL

Solubility in water Miscible

Rapidly degradable 78 % (28 d) OECD 301F

2-(2-AMINOETHOXY)ETHANOL

Rapidly degradable 84 % (28 d) OECD 302/B

1,2-BENZISOTHIAZOL-3(2H)-ONE

NOT rapidly degradable 17 % (28d) OECD 302/B

12.3. Bioaccumulative potential

EDETIC ACID

Partition coefficient: n-octanol/water -3,34 BCF 1,1

1-AMINOPROPAN-2-OL

Partition coefficient: n-octanol/water -0,93 Log Kow (OECD -107)

BCF 0,11

1,2-BENZISOTHIAZOL-3(2H)-ONE

Partition coefficient: n-octanol/water 0,64 Kow BCF 3,2



PERFORMA HW+

Revision nr. 3 Dated 10/09/2019

Printed on 10/09/2019

Page n. 9/12

12.4. Mobility in soil

1-AMINOPROPAN-2-OL

Partition coefficient: soil/water

1,78

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 1760

14.2. UN proper shipping name

ADR / RID: CORROSIVE LIQUID, N.O.S. (1,2-BENZISOTHIAZOL-3(2H)-ONE; 1-AMINOPROPAN-2-OL; 2-(2-AMINOETHOXYOSSI)ETHANOL)

IMDG: CORROSIVE LIQUID, N.O.S. (1,2-BENZISOTHIAZOL-3(2H)-ONE; 1-AMINOPROPAN-2-OL; 2-(2-AMINOETHOXYOSSI)ETHANOL)

IATA: CORROSIVE LIQUID, N.O.S. (1,2-BENZISOTHIAZOL-3(2H)-ONE; 1-AMINOPROPAN-2-OL; 2-(2-AMINOETHOXYOSSI)ETHANOL)

14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8

IMDG: Class: 8 Label: 8

IATA: Class: 8 Label: 8



14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

ΕN

iforma

CENTRO DISTRIBUZIONE UTENSILI SCPA

Revision nr 3

Dated 10/09/2019

ΕN

Printed on 10/09/2019

Page n. 10/12

PERFORMA HW+

14.6. Special precautions for user

HIN - Kemler: 80 ADR / RID-

Limited Quantities: 5 L

Limited Quantities: 5 L

Tunnel restriction code: (E)

Special Provision: -

IMDG: EMS: F-A, S-B

> Maximum quantity: 60 L Cargo:

Packaging instructions: 856 Packaging instructions: 852

Pass.: Maximum quantity: 5 L

Special Instructions: A3, A803

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Information not relevant.

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

IATA:

Point

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

3

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 2: Hazard to waters.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4 Acute toxicity, category 4 Skin Corr. 1B Skin corrosion, category 1B

iforma

CENTRO DISTRIBUZIONE UTENSILI SCPA

Revision nr 3 Dated 10/09/2019

ΕN

Printed on 10/09/2019

Page n. 11/12

PERFORMA HW+

Skin Corr. 1 Skin corrosion, category 1

Eye Dam. 1 Serious eye damage, category 1

Eye Irrit. 2 Eye irritation, category 2 Skin Irrit. 2 Skin irritation, category 2 Skin Sens. 1 Skin sensitization, category 1

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (l Atp. CLP) of the European Parliament 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EÚ) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)



PERFORMA HW+

Revision nr. 3 Dated 10/09/2019 ΕN

Printed on 10/09/2019

Page n. 12/12

- 14. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- The Merck Index. 10th Edition Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.