Revision nr. 1 Ti.Pi.Ci. S.a.s. Dated 05/12/2022 First compilation Printed on 05/12/2022 160619 -- HYDROGUARD Primer SZ Page n. 1/20

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: 160619-

Product name **HYDROGUARD Primer SZ**

1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use Component "A" for two components water based paint.

1.3. Details of the supplier of the safety data sheet

Ti.Pi.Ci. S.a.s. Full address Via Val Lerone, 21 District and Country 16011 Arenzano (GE)

Italy

Tel. +39 010 9111368 Fax +39 010 9134188

e-mail address of the competent person

responsible for the Safety Data Sheet laboris@tipici.net

1.4. Emergency telephone number

Centro Antiveleni di Bergamo +39800883300 (Azienda Ospedaliera Papa Giovanni XXII -For urgent inquiries refer to

Centro Antiveleni di Firenze +39055/7947819 (CAV Ospedale Careggi - Firenze) Centro Antiveleni di Foggia +39800183459 (Az. Osp. Univ. Foggia - Foggia) Centro Antiveleni di Milano +3902/66101029 (CAO Ospedale Niguarda Cà Granda -

Milano)

Centro Antiveleni di Napoli +39081/5453333 (CAV Ospedale Cardarelli - Napoli) Centro Antiveleni di Pavia +390382/24444 (CAV IRCCS Fondazione Maugeri - Pavia) Centro Antiveleni di Roma +3906/3054343 (CAV Policlinico Gemelli - Roma) Centro Antiveleni di Roma +3906/49978000 (CAV Policlinico Umberto I - Roma) Centro Antiveleni di Roma +3906/68593726 (CAV Osp. Pediatrico Bambino Gesù -

Centro Antiveleni di Verona +39800011858 (Azienda Ospedaliera Integrata - Verona)

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 2020/878. 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 sensitization, category 1A H317 May cause an allergic skin reaction. Hazardous to the aquatic environment, chronic toxicity, H411 Toxic to aquatic life with long lasting effects. category 2

Ti.Pi.Ci. S.a.s. Revision nr. 1 Dated 05/12/2022 First compilation Printed on 05/12/2022 Page n. 2/20

2.2. Label elements

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

Hazard pictograms:





Signal words: Warning

Hazard statements:

H317 May cause an allergic skin reaction.H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P280 Wear protective gloves.

P273 Avoid release to the environment.

P391 Collect spillage.

P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

Contains: MALEIC ANHYDRIDE

Fatty acids, C14-18 and C16-18-unsatd., maleated

VOC (Directive 2004/42/EC):

Two - pack performance coatings.

VOC given in g/litre of product in a ready-to-use condition : 46,10
Limit value: 140,00

- Catalysed with : 25,00 % CAT. per HYDROGUARD Primer SZ

- Thinned with : 5,00 % WATER

2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Revision nr. 1

Dated 05/12/2022

First compilation

First compilation
Printed on 05/12/2022

Page n. 3/20

160619 -- HYDROGUARD Primer SZ

Identification Classification (EC) 1272/2008 (CLP) x = Conc. % Aluminum hydrogen triphosphate INDEX - $4.5 \le x < 5$ Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335 EC 237-714-9 CAS 13939-25-8 1-METHOXY-2-PROPANOL INDEX 603-064-00-3 $4 \le x < 4,5$ Flam. Liq. 3 H226, STOT SE 3 H336 EC 203-539-1 CAS 107-98-2 REACH Reg. 01-2119457435-35-ZINC OXIDE INDEX 030-013-00-7 $2.5 \le x < 3$ Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1 EC 215-222-5 CAS 1314-13-2 REACH Reg. 01-2119463881-32 **QUARTZ** INDEX -**STOT RE 2 H373** $1,5 \le x < 2$ EC 238-878-4 CAS 14808-60-7 2-BUTOXYETHANOL INDEX 603-014-00-0 $0.2 \le x < 0.3$ Acute Tox. 3 H331, Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315 EC 203-905-0 LD50 Oral: 1200 mg/kg, LC50 Inhalation vapours: 3 mg/l/4h CAS 111-76-2 Fatty acids, C14-18 and C16-18unsatd., maleated $0.1 \le x < 0.2$ INDEX Skin Irrit. 2 H315, Skin Sens. 1 H317 EC 288-306-2 CAS 85711-46-2 REACH Reg. 01-2119976378-19-**XYLENE (MIXTURE OF ISOMERS)** INDEX 601-022-00-9 $0,1 \le x < 0,2$ Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP Regulation: C EC 215-535-7 STA Dermal: 1100 mg/kg, STA Inhalation vapours: 11 mg/l CAS 1330-20-7 **ETHYLBENZENE** INDEX 601-023-00-4 $0 \le x < 0,1$ Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373 EC 202-849-4 LC50 Inhalation vapours: 17,2 mg/l/4h CAS 100-41-4 2-ETHYLESANOL INDEX - $0 \le x < 0,1$ Eye Irrit. 2 H319, Skin Irrit. 2 H315 EC 203-234-3 CAS 104-76-7 **MALEIC ANHYDRIDE** INDEX 607-096-00-9 $0,001 \le x < 0,1$ Acute Tox. 4 H302, STOT RE 1 H372, Skin Corr. 1B H314, Eye Dam. 1

H318, Resp. Sens. 1 H334, Skin Sens. 1A H317, EUH071

Ti.Pi.Ci. S.a.s.	Revision nr. 1
	Dated 05/12/2022
	First compilation
160619 HYDROGUARD Primer SZ	Printed on 05/12/2022
	Page n. 4/20

EC 203-571-6 Skin Sens. 1A H317: ≥ 0,001% CAS 108-31-6 LD50 Oral: 400 mg/kg

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

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and 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 breathe combustion products.

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

Ti.Pi.Ci. S.a.s.	Revision nr. 1
	Dated 05/12/2022
	First compilation
160619 HYDROGUARD Primer SZ	Printed on 05/12/2022
	Page n. 5/20

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.

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

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

EU

DEU Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. Deutschland

MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher

Arbeitsstoffe, Mitteilung 56

ESP España Límites de exposición profesional para agentes químicos en España 2021 FRA France

Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS

ITA Italia Decreto Legislativo 9 Aprile 2008, n.81

GBR United Kingdom EH40/2005 Workplace exposure limits (Fourth Edition 2020)

Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; OEL EU

Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive

2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

TLV-ACGIH ACGIH 2021

1-METHOXY-2-PROPANOL

Threshold Limit Value

Revision nr. 1

Dated 05/12/2022

First compilation

Printed on 05/12/2022

160619- - HYDROGUARD Primer SZ

Page n. 6/20

Туре	Country	Country TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	
VLA	ESP	375	100	568	150	SKIN
VLEP	FRA	188	50	375	100	SKIN
VLEP	ITA	375	100	568	150	SKIN
WEL	GBR	375	100	560	150	SKIN
OEL	EU	375	100	568	150	SKIN
TLV-ACGIH		184	50	368	100	

ZINC OXIDE Threshold Limit Value	ie						
Туре	Country	TWA/8h	TWA/8h STEL/15min			Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
MAK	DEU	2		4		INHAL	
MAK	DEU	0,1		0,4		RESP	
VLA	ESP	2		10			
VLEP	FRA	5					
TLV-ACGIH		2		10		RESP	

QUARTZ							
Threshold Limit Value							
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
VLA	ESP		0,05			RESP	
VLEP	FRA	0,1				RESP	
VLEP	ITA	0,1				RESP	
OEL	EU	0,1				RESP	
TLV-ACGIH		0,025				RESP	

Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	49	10	98 (C)	20 (C)	SKIN	
MAK	DEU	49	10	98	20	SKIN	Hinweis
VLA	ESP	98	20	245	50	SKIN	
VLEP	FRA	49	10	246	50	SKIN	
VLEP	ITA	98	20	246	50	SKIN	
WEL	GBR	123	25	246	50	SKIN	
OEL	EU	98	20	246	50	SKIN	
TLV-ACGIH		97	20				

XYLENE (MIXTURE OF ISOMERS)

Revision nr. 1

Dated 05/12/2022

First compilation

Printed on 05/12/2022

160619- - HYDROGUARD Primer SZ

Page n. 7/20

Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	440	100	880	200	SKIN	
MAK	DEU	440	100	880	200	SKIN	
VLA	ESP	221	50	442	100	SKIN	
VLEP	FRA	221	50	442	100	SKIN	
VLEP	ITA	221	50	442	100	SKIN	
WEL	GBR	220	50	441	100	SKIN	
OEL	EU	221	50	442	100	SKIN	
TLV-ACGIH			20				

ETHYLBENZENE							
Threshold Limit Value	ue						
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	88	20	176	40	SKIN	
MAK	DEU	88	20	176	40	SKIN	
VLA	ESP	441	100	884	200	SKIN	
VLEP	FRA	88,4	20	442	100	SKIN	
VLEP	ITA	442	100	884	200	SKIN	
WEL	GBR	441	100	552	125	SKIN	
OEL	EU	442	100	884	200	SKIN	
TLV-ACGIH		87	20				

2-ETHYLESANOL Threshold Limit Value						
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	5.4	1			

MALEIC ANHYDRIDE Threshold Limit Value							
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	0,081	0,02	0,081 (C)	0,02 (C)		
MAK	DEU	0,081	0,02	0,081 (C)	0,02 (C)		C = 0,20 mg/m3
VLA	ESP	0,4	0,1				
VLEP	FRA			1			
WEL	GBR	1		3			
TLV-ACGIH		0,01	0,0025			INHAL	

Legend:

Ti.Pi.Ci. S.a.s.	Revision nr. 1
	Dated 05/12/2022
	First compilation
160619 HYDROGUARD Primer SZ	Printed on 05/12/2022
	Page n. 8/20

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

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 II 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 airtight protective 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.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	viscous liquid	
Colour	different colours	
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not flammable	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 65 °C	

Revision nr. 1

Dated 05/12/2022

First compilation
Printed on 05/12/2022

Page n. 9/20

160619 -- HYDROGUARD Primer SZ

Auto-ignition temperature not available

Decomposition temperature not available

pH

Kinematic viscosity not available

Solubility miscible with water

Partition coefficient: n-octanol/water not available

Vapour pressure not available

Density and/or relative density 1,2 kg/l
Relative vapour density not available
Particle characteristics not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

 VOC (Directive 2004/42/EC):
 5,19 % - 62,27 g/litre

 VOC (volatile carbon)
 2,73 % - 32,80 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.

1-METHOXY-2-PROPANOL

Dissolves various plastic materials. Stable in normal conditions of use and storage.

Absorbs and disolves in water and in organic solvents. With air it may slowly form explosive peroxides.

2-BUTOXYETHANOL

Decomposes under the effect of heat.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

1-METHOXY-2-PROPANOL

May react dangerously with: strong oxidising agents, strong acids.

Ti.Pi.Ci. S.a.s.	Revision nr. 1
	Dated 05/12/2022
	First compilation
160619 HYDROGUARD Primer SZ	Printed on 05/12/2022
100010 111211000711121111110100	Page n. 10/20

2-BUTOXYETHANOL

May react dangerously with: aluminium,oxidising agents.Forms peroxides with: air.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage.Reacts violently with: strong oxidants,strong acids,nitric acid,perchlorates.May form explosive mixtures with: air.

ETHYLBENZENE

Reacts violently with: strong oxidants.Attacks various types of plastic materials.May form explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

1-METHOXY-2-PROPANOL

Avoid exposure to: air.

2-BUTOXYETHANOL

Avoid exposure to: sources of heat,naked flames.

10.5. Incompatible materials

1-METHOXY-2-PROPANOL

Incompatible with: oxidising substances, strong acids, alkaline metals.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

2-BUTOXYETHANOL

May develop: hydrogen.

ETHYLBENZENE

May develop: methane, styrene, hydrogen, ethane.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Ti.Pi.Ci. S.a.s.	Revision nr. 1
	Dated 05/12/2022
	First compilation
160619 HYDROGUARD Primer SZ	Printed on 05/12/2022
	Page n. 11/20

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

1-METHOXY-2-PROPANOL

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

ETHYLBENZENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

1-METHOXY-2-PROPANOL

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product. Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported.

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

ETHYLBENZENE

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctive and respiratory tract.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

Revision nr. 1 Ti.Pi.Ci. S.a.s. Dated 05/12/2022 First compilation Printed on 05/12/2022 160619 -- HYDROGUARD Primer SZ Page n. 12/20

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture: > 20 mg/l

ATE (Oral) of the mixture: Not classified (no significant component) ATE (Dermal) of the mixture: Not classified (no significant component)

1-METHOXY-2-PROPANOL

LD50 (Dermal): 13000 mg/kg Rabbit LD50 (Oral): 5300 mg/kg Rat LC50 (Inhalation vapours): 54,6 mg/l/4h Rat

2-BUTOXYETHANOL

LD50 (Oral): 1200 mg/kg Guinea pig

3 mg/l/4h Rat LC50 (Inhalation vapours):

XYLENE (MIXTURE OF ISOMERS)

LD50 (Dermal): 4350 mg/kg Rabbit

STA (Dermal): 1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

3523 mg/kg Rat LD50 (Oral):

LC50 (Inhalation vapours): 26 mg/l/4h Rat

ETHYLBENZENE

LD50 (Dermal): LD50 (Oral): 15354 mg/kg Rabbit 3500 mg/kg Rat LC50 (Inhalation vapours): 17,2 mg/l/4h Rat

MALEIC ANHYDRIDE

LD50 (Dermal): 610 mg/kg Rat 400 mg/kg Rat LD50 (Oral):

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Ti.Pi.Ci. S.a.s.	Revision nr. 1
	Dated 05/12/2022
	First compilation
160619 HYDROGUARD Primer SZ	Printed on 05/12/2022
100010 11151100071112 1 1111101 02	Page n. 13/20

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

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

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

Ti.Pi.Ci. S.a.s. Revision nr. 1 Dated 05/12/2022 First compilation Printed on 05/12/2022 Page n. 14/20

SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on acquatic environment.

12.1. Toxicity

ZINC OXIDE

LC50 - for Fish 1,1 mg/l/96h Oncorhynchus mykiss EC50 - for Crustacea 1,7 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants 0,14 mg/l/72h Pseudokirchnerella subcapitata

Chronic NOEC for Fish 0,53 mg/l
Chronic NOEC for Algae / Aquatic Plants 0,024 mg/l

12.2. Persistence and degradability

XYLENE (MIXTURE OF ISOMERS)

Solubility in water 100 - 1000 mg/l

Rapidly degradable ETHYLBENZENE

Solubility in water 1000 - 10000 mg/l

Rapidly degradable 2-BUTOXYETHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

1-METHOXY-2-PROPANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

MALEÍC ANHYDRIDE

Solubility in water > 10000 mg/l

Entirely degradable

ZINC OXIDE

Solubility in water 2,9 mg/l

NOT rapidly degradable

12.3. Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: n-octanol/water 3,12 BCF 25,9

ETHYLBENZENE

Partition coefficient: n-octanol/water 3,6

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water 0,81

1-METHOXY-2-PROPANOL

Partition coefficient: n-octanol/water < 1

Ti.Pi.Ci. S.a.s. Revision nr. 1 Dated 05/12/2022 First compilation Printed on 05/12/2022 Page n. 15/20

MALEIC ANHYDRIDE

Partition coefficient: n-octanol/water -2,78

ZINC OXIDE

BCF > 175

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient: soil/water 2,73

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 ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. 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 or ID number

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not

submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or

5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to

IATA dangerous goods regulations.

14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE)

Dated 05/12/2022

Revision nr. 1

Page n. 16/20

First compilation

Printed on 05/12/2022

160619 -- HYDROGUARD Primer SZ

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE) IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ZINC OXIDE)

14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9

IATA: Class: 9 Label: 9

14.4. Packing group

Ш ADR / RID, IMDG, IATA:

14.5. Environmental hazards

ADR / RID: Environmentally

Hazardous

IMDG: Marine Pollutant

IATA: Environmentally

Hazardous



14.6. Special precautions for user

ADR / RID: HIN - Kemler: 90 Limited Tunnel Quantities: 5 restriction code: (-)

Special provision: -

IMDG: EMS: F-A, S-F Limited

Quantities: 5

Maximum

Packaging Cargo: instructions: quantity: 450

964

964

Pass.: Packaging Maximum instructions:

quantity: 450

Special provision: A97, A158,

A197, A215

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

IATA:

SECTION 15. Regulatory information

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

Ti.Pi.Ci. S.a.s. Revision nr. 1 Dated 05/12/2022 First compilation Printed on 05/12/2022 Page n. 17/20

Seveso Category - Directive 2012/18/EU: E2

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

<u>Product</u>

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

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.

VOC (Directive 2004/42/EC):

Two - pack performance coatings.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

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

Revision nr. 1
Dated 05/12/2022
First compilation
Printed on 05/12/2022

Page n. 18/20

160619 -- HYDROGUARD Primer SZ

Flam. Liq. 2 Flammable liquid, category 2
Flam. Liq. 3 Flammable liquid, category 3
Acute Tox. 3 Acute toxicity, category 3
Acute Tox. 4 Acute toxicity, category 4

STOT RE 1 Specific target organ toxicity - repeated exposure, category 1

Asp. Tox. 1 Aspiration hazard, category 1

STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

Skin Corr. 1B Skin corrosion, category 1B

Eye Irrit. 2 Eye irritation, category 2

Skin Irrit. 2 Skin irritation, category 2

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

Resp. Sens. 1Respiratory sensitization, category 1Skin Sens. 1Skin sensitization, category 1Skin Sens. 1ASkin sensitization, category 1A

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

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

H225 Highly flammable liquid and vapour.H226 Flammable liquid and vapour.

H331 Toxic if inhaled.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

H373 May cause damage to organs through prolonged or repeated exposure.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.H315 Causes skin irritation.

H335 May cause respiratory irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.H411 Toxic to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road

- ATE: Acute Toxicity Estimate

- CAS: Chemical Abstract Service Number

CE50: Effective concentration (required to induce a 50% effect)

- CE: Identifier in ESIS (European archive of existing substances)

- CLP: Regulation (EC) 1272/2008 - DNEL: Derived No Effect Level

- EmS: Emergency Schedule

Revision nr. 1 Ti.Pi.Ci. S.a.s. Dated 05/12/2022 First compilation Printed on 05/12/2022 160619 -- HYDROGUARD Primer SZ Page n. 19/20

- 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: 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: Regulation (EC) 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: Time-weighted average exposure limit
- TWA STEL: Short-term 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) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) 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
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- 13. Regulation (EU) 2017/776 (X Atp. CLP) 14. Regulation (EU) 2018/669 (XI Atp. CLP)
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- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP) 22. Delegated Regulation (UE) 2022/692 (XVIII 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.

CALCULATION METHODS FOR CLASSIFICATION

Ti.Pi.Ci. S.a.s.	Revision nr. 1
	Dated 05/12/2022
	First compilation
160619 HYDROGUARD Primer SZ	Printed on 05/12/2022
	Page n. 20/20

160619 HYDROGUARD Primer SZ	Page n. 20/20
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Anne. chemical-physical properties are reported in section 9. Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determing Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless	ned otherwise in Section 11.