Ti.Pi.Ci. S.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
	Page n. 1/12
	Replaced revision:9 (Dated: 20/04/2021)

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: 159879-159881-160007-160385-160405
Product name CAT. per HYDROGUARD HB series

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

1.3. Details of the supplier of the safety data sheet

Name 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

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

Bergamo)

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 +3906/68593726 (CAV Osp. Pediatrico Bambino Gesù -

Roma)

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:

Serious eye damage, category 1 H318 Causes serious eye damage.

Ti.Pi.Ci. S.a.s. Revision nr. 10 Dated 21/11/2022 Printed on 21/11/2022 Page n. 2/12 Replaced revision:9 (Dated: 20/04/2021)

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:

H318 Causes serious eye damage.

Precautionary statements:

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

rinsing

P280 Wear eye protection / face protection.

P310 Immediately call a POISON CENTER / doctor / . . .

Contains: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine

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:

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

Phenol, 4,4'-(1-

methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-

ethanediamine

INDEX $50 \le x < 90$ Eye Dam. 1 H318

EC -

CAS 455946-46-0

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

SECTION 4. First aid measures

II.PI.CI. 5.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
	Page n. 3/12
	Replaced revision:9 (Dated: 20/04/2021)

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

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.

Ti.Pi.Ci. S.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
	Page n. 4/12
	Replaced revision:9 (Dated: 20/04/2021)

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.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Information not available

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 I 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).

Ti.Pi.Ci. S.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
	Page n. 5/12
	Replaced revision:9 (Dated: 20/04/2021)

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 B 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

Properties	Value	Information
Appearance	liquid	
Colour	straw yellow	
Odour	amino	
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	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
рН	not available	
Kinematic viscosity	not available	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,065 (+-) 0,050	
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

Information not available

Ti.Pi.Ci. S.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
φοι του σου του σου σου σου σου σου σου σου σου σου σ	Page n. 6/12
	Replaced revision:9 (Dated: 20/04/2021)

SECTION 10. Stability and reactivity

10.1. Reactivity

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

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.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Ti.Pi.Ci. S	S.a.s.	Revision nr. 10 Dated 21/11/2022
CAT. per HYDROGU	ARD HB series	Printed on 21/11/2022 Page n. 7/12
		Replaced revision:9 (Dated: 20/04/2021)
Information not available		
Interactive effects		
Information not available		
ACUTE TOXICITY		
ATE (Inhalation) of the mixture: ATE (Oral) of the mixture: ATE (Dermal) of the mixture:	Not classified (no significant component) Not classified (no significant component) Not classified (no significant component)	
SKIN CORROSION / IRRITATION		
Does not meet the classification criteria for this hazard class		
SERIOUS EYE DAMAGE / IRRITATION		
Causes serious eye damage		
RESPIRATORY OR SKIN SENSITISATION		
Does not meet the classification criteria for this hazard class		
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		

Ti.Pi.Ci. S.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
57111 p 37111 2113 3 37111 2 33113	Page n. 8/12
	Replaced revision:9 (Dated: 20/04/2021)

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.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Information not available

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

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%.

Ti.Pi.Ci. S.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
For 111 2110 201 1112 112 201100	Page n. 9/12
	Replaced revision:9 (Dated: 20/04/2021)

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.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.
SECTION 14. Transport information
The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.
14.1. UN number or ID number
not applicable
14.2. UN proper shipping name
not applicable
14.3. Transport hazard class(es)
not applicable
14.4. Packing group
not applicable
14.5. Environmental hazards

Ti.Pi.Ci. S.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
	Page n. 10/12 Replaced revision:9 (Dated: 20/04/2021)
	Neplaced Tevision.9 (Dated: 20/04/2021)
not applicable	
14.6. Special precautions for user	
not applicable	
14.7. Maritime transport in bulk according to IMO instruments	
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/EU: None	
Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006	
Product	
Point 3	
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	

Ti.Pi.Ci. S.a.s.	Revision nr. 10
	Dated 21/11/2022
CAT. per HYDROGUARD HB series	Printed on 21/11/2022
	Page n. 11/12
	Replaced revision:9 (Dated: 20/04/2021)

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.

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:

Eye Dam. 1 Serious eye damage, category 1 H318 Causes serious eye damage.

I FGFND:

- 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
- 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

Revision nr. 10 Ti.Pi.Ci. S.a.s. Dated 21/11/2022 Printed on 21/11/2022 **CAT. per HYDROGUARD HB series** Page n. 12/12 Replaced revision:9 (Dated: 20/04/2021)

- 12. Regulation (EU) 2016/1179 (IX Atp. CLP) 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 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

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of 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 determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

02 / 09 / 11 / 12 / 16.