products and services for the galvanising industry

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : Hydronet-S

1.2. Recommended use and restrictions on use

Acidic degreaser, phosphoric acid-based.

1.3. Supplier

SOPRIN S.r.I. Via dell'Industria 106 31052 Maserada Sul Piave (TV) - Italy T (+39) 0422 521025 - F (+39) 0422 521060 soprin@soprin.it (Alessandro Padovan)

1.4. Emergency telephone number

Emergency number : CHEMTREC 800 424 9300

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS-US/CAN)

Corrosive to metals Category 1 H290
Skin corrosion/irritation Category 1A H314
Serious eye damage/eye irritation Category 1 H318
Carcinogenicity Category 1A H350

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US/CAN labeling

Hazard pictograms





GHS05

Signal word : Danger

Hazard statements : H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H350 - May cause cancer

Precautionary statements : P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P234 - Keep only in original container

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash thoroughly after handling

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

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 P310 - Immediately call a POISON CENTER/doctor

P321 - Specific treatment (see label)

P363 - Wash contaminated clothing before reuse P390 - Absorb spillage to prevent material damage

P405 - Store locked up

P406 - Store in corrosive resistant container with a resistant inner liner

P501-Dispose of contents/container in accordance with local/regional/national/international/secondary and secondary accordance with local/regional/national/secondary.

regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US/CAN)

No data available

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SECTION 3: Composition/Information on ingredients

Substances

Not applicable

Mixtures

Name	Product identifier	%	Classification (GHS-CA)	Classification (GHS-US)
Phosphoric acid	(CAS No) 7664-38-2	15 - 16.5	Met. Corr. 1, H290 HHNOC 1, HHNOC Skin Corr. 1, H314 Eye Dam. 1, H318	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314
Poly(oxy-1,2-ethanediyl), .alpha (2-propylheptyl)omegahydroxy-	(CAS No) 160875-66-1	13.5 - 15	Not classified	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Sulfuric acid	(CAS No) 7664-93-9	3.5 - 4	Met. Corr. 1, H290 Acute Tox. 2 (Inhalation), H330 HHNOC 1, HHNOC Skin Corr. 1, H314 Eye Dam. 1, H318	Met. Corr. 1, H290 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1, H314 Eye Dam. 1, H318Carc. 1A, H350

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

Description of first aid measures

First-aid measures after 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

First-aid measures after skin contact : Remove contaminated clothing. Rinse skin with a shower immediately. Get medical

advice/attention.

First-aid measures after eye contact 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.

First-aid measures after ingestion Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Possible vapours are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours. Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness.

: This product is corrosive and causes serious burns and vesicles on the skin, which can arise Symptoms/injuries after skin contact even after exposure. Burns are very stinging and painful.

Symptoms/injuries after eye contact : Upon contact with eyes, may cause serious harm, such as cornea opacity, iris lesions,

irreversible eye coloration.

Symptoms/injuries after ingestion : May cause mouth, throat and esophagus burns; sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Carbon dioxide, foam, powder and water spray.

Unsuitable extinguishing media

5.2. Special hazards arising from the substance or mixture

Fire hazard : None. : None known. Explosion hazard

Advice for firefighters

Firefighting instructions : 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.

Protection during firefighting : Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

Environmental precautions

Avoid release to the environment.

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6.3. Methods and material for containment and cleaning up

For containment

: Stop the flow of material, if this is without risk.

Methods for 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. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sulfuric acid (7664-93-9)		
USA - ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m³ (thoracic particulate matter)
USA - OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
Canada (Quebec)	VECD (mg/m³)	3 mg/m³
Canada (Quebec)	VEMP (mg/m³)	1 mg/m³
Alberta	OEL STEL (mg/m³)	3 mg/m³
Alberta	OEL TWA (mg/m³)	1 mg/m³
British Columbia	OEL TWA (mg/m³)	0.2 mg/m³ (Thoracic, contained in strong inorganic acid mists)
Manitoba	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic particulate matter)
New Brunswick	OEL STEL (mg/m³)	3 mg/m³
New Brunswick	OEL TWA (mg/m³)	1 mg/m³
New Foundland & Labrador	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic particulate matter)
Nova Scotia	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic particulate matter)
Nunavut	OEL STEL (mg/m³)	0.6 mg/m³ (thoracic fraction)
Nunavut	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic fraction)
Northwest Territories	OEL STEL (mg/m³)	0.6 mg/m³ (thoracic fraction, strong acid mists only)
Northwest Territories	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic fraction, strong acid mists only)
Ontario	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic)
Prince Edward Island	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic particulate matter)
Saskatchewan	OEL STEL (mg/m³)	0.6 mg/m³ (thoracic fraction)
Saskatchewan	OEL TWA (mg/m³)	0.2 mg/m³ (thoracic fraction)
Yukon	OEL STEL (mg/m³)	1 mg/m³
Yukon	OEL TWA (mg/m³)	1 mg/m³
Phosphoric acid (7664-38-2)		
USA - ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
USA - ACGIH	ACGIH STEL (mg/m³)	3 mg/m³
USA - OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
Canada (Quebec)	VECD (mg/m³)	3 mg/m³
Canada (Quebec)	VEMP (mg/m³)	1 mg/m³
Alberta	OEL STEL (mg/m³)	3 mg/m³
Alberta	OEL TWA (mg/m³)	1 mg/m³
British Columbia	OEL STEL (mg/m³)	3 mg/m³
British Columbia	OEL TWA (mg/m³)	1 mg/m³

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Phosphoric acid (7664-38-2)		
Manitoba	OEL STEL (mg/m³)	3 mg/m³
Manitoba	OEL TWA (mg/m³)	1 mg/m³
New Brunswick	OEL STEL (mg/m³)	3 mg/m³
New Brunswick	OEL TWA (mg/m³)	1 mg/m³
New Foundland & Labrador	OEL STEL (mg/m³)	3 mg/m³
New Foundland & Labrador	OEL TWA (mg/m³)	1 mg/m³
Nova Scotia	OEL STEL (mg/m³)	3 mg/m³
Nova Scotia	OEL TWA (mg/m³)	1 mg/m³
Nunavut	OEL STEL (mg/m³)	3 mg/m³
Nunavut	OEL TWA (mg/m³)	1 mg/m³
Northwest Territories	OEL STEL (mg/m³)	3 mg/m³
Northwest Territories	OEL TWA (mg/m³)	1 mg/m³
Ontario	OEL STEL (mg/m³)	3 mg/m³
Ontario	OEL TWA (mg/m³)	1 mg/m³
Prince Edward Island	OEL STEL (mg/m³)	3 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	1 mg/m³
Saskatchewan	OEL STEL (mg/m³)	3 mg/m³
Saskatchewan	OEL TWA (mg/m³)	1 mg/m³
Yukon	OEL STEL (mg/m³)	3 mg/m³
Yukon	OEL TWA (mg/m³)	1 mg/m³

8.2. Exposure controls

Auto-ignition temperature

Viscosity

Decomposition temperature

Appropriate engineering controls : To maintain exposure below recommended values, use this product with adequate exhaust

ventilation where dust, mist or spray from this product may be generated.

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Hand protection : Use impervious gloves such as neoprene, nitrile, or rubber for hand protection.

Eye protection : Airtight protective goggles
Skin and body protection : Wear suitable working clothes.

Respiratory protection : If airborne concentrations are above the applicable exposure limits, use NIOSH approved

respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: LiquidColor: Dark brownOdor: Slightly pungent.Odor threshold: No data available

pH : < 1

Melting point : No data available

Freezing point : <-5°C

Boiling point : No data available

Flash point : > 100 °C

Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available : No data available **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available Vapor pressure Relative density : No data available Relative vapor density at 20 °C No data available Specific gravity / density : 1130 kg/m³ Solubility : Soluble in water : No data available Log Pow

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: No data available

: No data available

: No data available

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Viscosity, kinematic : No data available Viscosity, dynamic : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

PHOSPHORIC ACID: Sources of ignition. Under the action of heat, from 213°C, the phosphoric acid releases water and turns into the pyrophosphoric acid.

10.5. Incompatible materials

PHOSPHORIC ACID: Metals, strong alkalis, aldehydes, sulphides and peroxides.

SULPHURIC ACID: flammable substances, reducing substances, basic substances, metals, organic substances and water.

10.6. Hazardous decomposition products

PHOSPHORIC ACID: phosphorus oxide.

SULPHURIC ACID: sulphur oxide.

Sulfuric acid (7664-93-9)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

LD50 oral rat	2140 mg/kg
LC50 inhalation rat (mg/l)	510 mg/m³ (Exposure time: 2 h)
Phosphoric acid (7664-38-2)	
LD50 oral rat	1530 mg/kg
LD50 dermal rabbit	2740 mg/kg
LC50 inhalation rat (mg/l)	> 850 mg/m³ (Exposure time: 1 h)

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: < 1

Serious eye damage/irritation : Causes serious eye damage.

pH: < 1

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Sulfuric acid (7664-93-9)	
IARC group	1 - Carcinogenic to humans
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified Specific target organ toxicity – repeated : Not classified

exposure

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Aquatic acute : Not classified

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Aquatic chronic : Not classified

Sulfuric acid (7664-93-9)	
LC50 fish 1	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
BCF fish 1	(no bioaccumulation)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Sulfuric acid (7664-93-9)	
BCF fish 1	(no bioaccumulation)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations

 $: \ \, {\hbox{Dispose of contents/container in accordance with local/regional/national/international}} \\$

regulations.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

TDG

UN-No. (TDG) : UN3264

Packing group : II - Medium Danger
TDG Primary Hazard Classes : 8 - Class 8 - Corrosives

Transport document description : UN3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid, Sulfuric acid),

8, II

Proper Shipping Name (TDG) : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Phosphoric acid, Sulfuric acid

Hazard labels (TDG) : 8 - Corrosive substances



TDG Special Provisions : 16 - 1) The technical name of the most dangerous substance related to the primary class must

be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(i)(A) of Part 3, Documentation. The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4, Dangerous Goods Safety

Marks.

2) subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical: a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example

in Canada is the "Food and Drugs Act".

Explosive Limit and Limited Quantity Index : 1 L
Excepted quantities (TDG) : E2
Passenger Carrying Road Vehicle or Passenger : 1 L

Carrying Railway Vehicle Index

14.2. Transport information/DOT

DOT

DOT NA no. : UN3264 UN-No.(DOT) : 3264

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Packing group (DOT) : II - Medium Danger

DOT Symbols : G - Identifies PSN requiring a technical name

Transport document description : UN3264 Corrosive liquid, acidic, inorganic, n.o.s.(Phosphoric acid, Sulfuric acid), 8, II

Proper Shipping Name (DOT) : Corrosive liquid, acidic, inorganic, n.o.s.(Phosphoric acid, Sulfuric acid)

Contains Statement Field Selection (DOT)

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

: No

Division (DOT) : 8

Hazard labels (DOT) : 8 - Corrosive



Dangerous for the environment

DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are

not authorized.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the

MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail : 1 L
(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 30 L

CFR 175.75)

DOT Vessel Stowage Location

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25

passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

Other information : No supplementary information available.

14.3. Air and sea transport

IMDG

UN-No. (IMDG) : 3264

Proper Shipping Name (IMDG) : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

Transport document description (IMDG) : UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid, Sulfuric acid),

8, II

Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : II - substances presenting medium danger

IATA

UN-No. (IATA) : 3264

Proper Shipping Name (IATA) : Corrosive liquid, acidic, inorganic, n.o.s.

Transport document description (IATA) : UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Sulfuric acid), 8, II

Class (IATA) : 8 - Corrosives
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. Canada National regulations

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Sulfuric acid (7664-93-9)

Listed on the Canadian DSL (Domestic Sustances List)

Phosphoric acid (7664-38-2)

Listed on the Canadian DSL (Domestic Sustances List)

15.2. US Federal regulations

Sulfuric acid (7664-93-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the United States SARA Section 302 Subject to reporting requirements of United States SARA Section 313	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
Phosphoric acid (7664-38-2)	

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy- (160875-66-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.3. US State regulations

Sulfuric acid (7664-93-9)

- U.S. Massachusetts Right To Know List
- U.S. Minnesota Hazardous Substance List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Phosphoric acid (7664-38-2)

- U.S. Massachusetts Right To Know List
- U.S. Minnesota Hazardous Substance List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled
H331	Toxic if inhaled
H350	May cause cancer

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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