

HYPRAL SP

Code: 0 234 6

Material Safety Data Sheet compliant with Regulation (EC) 1907/2006, Annex II, amended by Regulation (EC) 453/2010

Version 5.0.0

Revision: 31/03/15

Print Date : 31/03/15

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

1.1. Product identifier

Trade name **HYPRAL SP**

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

Use of the product

**Alkaline with a strong complexing power
CLEANING OF MILKING EQUIPMENT**

1.3. Details of the supplier of the safety data sheet

Company identification

**Manufacturer: HYPRED S.A.
57, Boulevard Jules VERGER B.P. 10180
35803 DINARD CEDEX - FRANCE
Tél : 33 2 99 16 50 00
Fax : 33 2 99 16 50 20
e-mail : hypred@hypred.fr**

For information regarding this safety data sheet, please contact :
hypred.regulatory@roullier.com

1.4. Emergency telephone number

Emergency phone number

Emergency direct number (24 hours a day, 7 days a week) : (+)1-760-476-3961

Access code : 333021

Call your medical practitioner LONDON (Information available at the National Poison Unit - Guy's Hospital)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 1272/2008/EC:

The mixture meets the classification criteria provided for under Regulation (EC) No 1272/2008.

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Skin corrosion - Category 1A

H314: Causes severe skin burns and eye damage.

Substance corrosive to metals - Category 1 H290: May be corrosive to metals.

Classification according to Directive 1999/45/EEC:

The mixture meets the classification criteria provided for under Directive 1999/45/EEC.

C : CORROSIVE

R35 : Causes severe burns.

2.2. Label elements

Labelling according to 1272/2008/EC Regulation:

Hazard pictograms(s) :



Signal word :

Danger

Hazard statement(s) :

H290: May be corrosive to metals.

H314: Causes severe skin burns and eye damage.

Precautionary statement(s) :

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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or doctor/physician.

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

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No additional information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable as this involves a mixture.

3.2. Mixtures

Chemical nature of the mixture : Alkaline with a strong complexing power

Substance(s)	CAS number (s)	EINECS number(s)	No registration REACH	Classification according to 67/548/EEC or 1999/45/EC	Classification according to Regulation 1272/2008/EC	Type
10% <= Sodium hydroxide < 30%	1310-73-2	215-185-5	01-2119457892-27	C , R35	Skin Corr. 1A H314 Met. Corr. 1 H290	(1) (2)
5% <= Ethylenediamine tetraacetic acid tetrasodium salt < 15%	64-02-8	200-573-9	01-2119486762-27	Xn , R20/22 R41	Acute Tox. 4 (inhalation) H332 Acute Tox. 4 (oral) H302 Eye Dam. 1 H318	(1)
2% <= Potassium hydroxide < 5%	1310-58-3	215-181-3	01-2119487136-33	C , R22 R35	Acute Tox. 4 (oral) H302 Skin Corr. 1A H314 Met. Corr. 1 H290	(1) (2)

Type

(1) : Substance classified as hazardous for health and/or the environment
(2) : Substance with an exposure limit at the work station.

Substance of very high concern candidate for the authorisation procedure:

- (3) : Substance considered as PBT (persistent, bioaccumulable, toxic)
(4) : Substance considered as vPvB (very persistent, very bioaccumulable)
(5) : Substance considered as carcinogenic category 1A
(6) : Substance considered as carcinogenic category 1B
(7) : Substance considered as mutagenic category 1A
(8) : Substance considered as mutagenic category 1B
(9) : Substance considered as reprotoxic category 1A
(10) : Substance considered as reprotoxic category 1B
(11) : Substance considered as endocrine disrupter

Full text of R-, H- and EUH- phrases see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General indications:

Take the contaminated clothes and shoes off immediately. Wash them before wearing them again.

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In case of faintness , get medical advice/attention. Show this safety data sheet to the doctor.

In the event of inhalation :

Bring to fresh air.

Put into practice respiratory help procedure if needed and get medical advice immediately.

In the event of contact with the skin :

Wash immediately with plenty of water for 15 minutes at least.

Immediately call a POISON CENTER or doctor/physician.

In the event of contact with the eyes :

Rinse at once with a soft stream of water for at least 15 minutes, eyes wide open.

Remove contact lenses if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

In the event of ingestion :

Rinse mouth.

Do NOT induce vomiting.

Send to hospital.

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

Skin contact : Corrosive : Causes severe burns.

Eye contact : Causes serious eye damage.

Ingestion : Causes severe burns in mouth and digestive tract.
Risk of perforating digestive tracts.

Inhalation : Aerosols can induce respiratory tracts irritation.

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

Treatments : Symptomatic treatment

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media :

Agents compatible with other products involved into fire.

Unsuitable extinguishing media :

None from our knowledge.

5.2. Special hazards arising from the substance or mixture

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HYPRAL SP is non-flammable.
However, in contact with certain metals (aluminium, zinc...), release of flammable and/or explosive hydrogen if ignited.
Risk nitrogen oxide emission (Nox) in the event of fire.

5.3. Advice for firefighters

Wear independent respiratory equipment and protective suit.
Collect contaminated firefighting water separately, must not be discharged into the drains.
Keep containers cool by spraying with water if exposed to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel :

Evacuate non-essential staff and those not equipped with individual protection apparatus.

6.1.2. For emergency responders :

Evacuate the personnel to a safe location.
Keep people upwind and away from the location of the flow/leak.
Use personal protection equipment.

6.2. Environmental precautions

Intervention limited to trained staff.
Do not discharge the product directly to sewer or to environment.
Take as soon as possible all incompatible materials away.

6.3. Methods and material for containment and cleaning up

Small spillage :

Wash with plenty of water.

Large spillage :

Mark out, dyke up with an inert absorbant and pump in an emergency tank.
Never return spills in original containers for re-use.
Keep in suitable, properly labelled and closed containers for disposal.

6.4. Reference to other sections

Respect protective measures presented at heading 8.
Refer to section 13 for the elimination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin, eyes and clothing.
Do not eat, drink or smoke in work area. Avoid projections during use.
Do not mix with an acid.
Take off immediately all contaminated clothing.

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Do not mix with strong oxidizing agents.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Storage :

- Keep only in the original container.
- Keep container closed.
- Keep in a clean and dry place.
- Keep away from products sensitive to alkalis.

7.2.2. Packaging or wrapping materials :

- High density polyethylene recommended.

7.3. Specific end use(s)

No other recommendation.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values :

Substance	Country	Type	Value	Unit	Comments	source
Potassium hydroxide	GBR	OEL Short term	2	mg/m ³		International limit values for chemical agents
Sodium hydroxide	GBR	OEL Short term	2	mg/m ³		International limit values for chemical agents

8.2. Exposure controls

Directive 98/24/EEC requires the employer to introduce risk management measures. If restricted or indicative regulatory limit values have been set for substances in section 8.1, the employer must act on the outcome of his chemical risk assessment by checking the professional exposure limit values for their compliance.

8.2.1. Appropriate engineering controls :

- Ensure adequate ventilation.
- Apply the necessary technical measures to comply with the professional exposure limit values.

8.2.2. Individual protection measures, such as personal protective equipment :

Eye/face protection :

Use safety glasses or facial screen in conformity with the EN 166 standard.



Hand protection :

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Use chemical resistant gloves approved to EN 374.
Examples of preferred materials for insulating gloves:
Butyl rubber.
Nitril.
Neoprene.
PVC
Do not wear polyvinyl alcohol (PVA) gloves.



Skin protection :

Wear boots and a protective cloth with chemical resistance.



Respiratory protection :

None under normal conditions of use.

Thermal hazards :

Not applicable

Health measures :

Safety shower and eye wash fountain near to workplace.
After using, wash systematically all personal protective equipment.
Handle in accordance with good industrial hygiene practices and the safety instructions.

8.2.3. Environmental exposure controls :

Do not discharge the product directly to sewer or to environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Appearance	Opalescent to very opalescent liquid
Colour	Yellowish
Odour	Odourless
Odour threshold	Non available
Pure pH	Non available
pH value at 10g/l	12.7±0.2
Freezing point :	-10 °C
Boiling point	> 100 °C
Flash point	Not applicable
Evaporation rate:	Non available
Flammability	Not applicable
Vapour pressure	Non available
Vapour density	Non available
Mass density	1.305±0.01 g/cm ³
Relative density	1.305±0.01
Solubility in water	Soluble in water in all proportions
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Non available
Viscosity	Non available
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information

No additional information.

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazards linked to exothermal reactions.

10.2. Chemical stability

Stable in the recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Exothermic reactions with acids.

Exothermic reactions with strong oxidizing agents.

10.4. Conditions to avoid

None to our knowledge.

10.5. Incompatible materials

Acids.

Strong oxidizing agents.

Light metals and/or colored.

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10.6. Hazardous decomposition products

In contact with certain metals (aluminium, zinc...), release of flammable and/or explosive hydrogen if ignited.
Risk nitrogen oxide emission (Nox) in the event of fire.

These data are given for the concentrated mixture. The use of the mixture under its diluted form must be performed in conformity with data given by the technical data sheet and the technical adviser.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance-related data:

Acute toxicity

Potassium hydroxide : LD 50 - oral rat 333 - 388 mg/kg bw. - MSDS supplier

Ethylenediamine tetraacetic acid tetrasodium salt : LD 50 - oral rat 1,780 mg/kg. - MSDS supplier

Ethylenediamine tetraacetic acid tetrasodium salt : LC 50 - inhalation - 4h rat 1.5 mg/L. - MSDS supplier

Sodium hydroxide (50%) : Oral . The oral DL50 has not been determined given the corrosiveness of the substance. - MSDS supplier

Sodium hydroxide (50) : Dermal route . The dermal DL50 has not been determined given the corrosiveness of the substance. - MSDS supplier

Skin corrosion/irritation

Sodium hydroxide (50%) : Cutaneous contact rat . Corrosive to the skin - MSDS supplier

Ethylenediamine tetraacetic acid tetrasodium salt : Skin irritation (OCDE 404): . non irritating - MSDS supplier

Potassium hydroxide (50%) : Skin irritation . Causes severe burns. - MSDS supplier

Serious eye damage/eye irritation

Sodium hydroxide (50%) : Eye contact : . corrosive to the eyes - MSDS supplier

Potassium hydroxide (50%) : Eye irritation . Risk of serious damage of eyes - MSDS supplier

Ethylenediamine tetraacetic acid tetrasodium salt : Eye contact : . Can induce serious ocular damages or even irreversibles - MSDS supplier

Respiratory tracts irritation

Sodium hydroxide (50%) : Respiratory tracts irritation . Fog inhalation is irritant for respiratory tract - MSDS supplier

Sensitisation

Ethylenediamine tetraacetic acid tetrasodium salt : Sensitisation guinea-pig (OCDE 406): . Not sensitising - The product has not been tested. The information comes from structure or analogue composition products. - MSDS supplier

Potassium hydroxide : Skin sensitisation - 24h monkey . Not sensitising - MSDS supplier

Mutagenicity

Ethylenediamine tetraacetic acid tetrasodium salt : Micronucleus test (OCDE 474): . Negative - Based on cross reading (N-(2-Hydroxyethyl)ethylenediaminetriacetic acid and trisodium salt)

Ethylenediamine tetraacetic acid tetrasodium salt : mouse (OCDE 476): . Negative - Based on cross reading (N-(2-Hydroxyethyl)ethylenediaminetriacetic acid and trisodium salt)

Ethylenediamine tetraacetic acid tetrasodium salt : Chromosomal aberration test (OCDE 473): . Negative - Based on cross reading (N-(2-Hydroxyethyl)ethylenediaminetriacetic acid and trisodium salt)

Ethylenediamine tetraacetic acid tetrasodium salt : Ames test (OCDE 471): . Negative - Based on cross reading (N-(2-Hydroxyethyl)ethylenediaminetriacetic acid and trisodium salt)

Sodium hydroxide : . Not mutagenic - MSDS supplier

Potassium hydroxide : (OCDE 471): . Negative - MSDS supplier

Carcinogenicity

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Sodium hydroxide : mouse . Not carcinogenic - MSDS supplier

Mix-related data :

Acute toxicity
. Not determined

Skin corrosion/irritation
Skin corrosivity . The mixture should be considered as corrosive because of its extreme pH.

Serious eye damage/eye irritation
Ocular corrosivity . Causes serious eye damage according to the criteria of Regulation 1272/2008/EC.

Respiratory or skin sensitisation
Skin sensitisation . The mixture is not considered as a skin sensitizer according to 1272/2008/EC Regulation.
Respiratory sensitization . The mixture is not considered as a respiratory sensitizer according to 1272/2008/EC Regulation.

Mutagenicity
. The classification criteria are not met given the available data.

Carcinogenicity
. The classification criteria are not met given the available data.

Reproductive toxicity
. The classification criteria are not met given the available data.

Specific target organ toxicity - single exposure
. The classification criteria are not met given the available data.

Specific target organ toxicity - repeated exposure
. The classification criteria are not met given the available data.

Aspiration hazard
. The classification criteria are not met given the available data.

Most important symptoms and effects, both acute and delayed :

Skin contact : Corrosive : Causes severe burns.

Eye contact : Causes serious eye damage.

Ingestion : Causes severe burns in mouth and digestive tract.
Risk of perforating digestive tracts.

Inhalation : Aerosols can induce respiratory tracts irritation.

SECTION 12: Ecological information

12.1. à 12.4. Toxicity - Persistence and degradability - Bioaccumulative potential - Mobility in soil

Substance-related data:

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Acute toxicity

Sodium hydroxide : LC 50 - 96 h fishes (Gambusia affinis) 35 - 189 mg/L. - MSDS supplier
Ethylenediamine tetraacetic acid tetrasodium salt (40%) : EC 20 - 30 min bacterias (OCDE 209): > 500 mg/L. - The product has not been tested. The information comes from structure or analogue composition products. - MSDS supplier
Ethylenediamine tetraacetic acid tetrasodium salt : EC 50 - 48h daphnia (Daphnia magna) > 100 mg/L. - The product has not been tested. The information comes from structure or analogue composition products. - MSDS supplier
Ethylenediamine tetraacetic acid tetrasodium salt : LC 50 - 96h fishes (Lepomis macrochirus) > 100 mg/L. - The product has not been tested. The information comes from structure or analogue composition products. - MSDS supplier
Potassium hydroxide : LC 50 - 24h fishes 80 mg/L. - MSDS supplier
Ethylenediamine tetraacetic acid tetrasodium salt : EC 50 - 72h Aquatic species > 100 mg/L. - MSDS supplier

Degradability

Sodium hydroxide (50%) : Biodegradability aerobic . Not applicable - MSDS supplier
Sodium hydroxide (50%) : Biodegradability anaerobic . Not applicable - MSDS supplier
Sodium hydroxide (50%) : Half life air 13 seconds. Degradation product = sodium carbonate - MSDS supplier
Sodium hydroxide (50%) : water. . Instantaneous ionization; Degradation products : salts - MSDS supplier
Sodium hydroxide (50%) : soil . Ionization / neutralization - MSDS supplier
Ethylenediamine tetraacetic acid tetrasodium salt : Biodegradability . Not easily biodegradable - MSDS supplier

Bioaccumulation

Sodium hydroxide (50%) : . Not applicable - MSDS supplier
Ethylenediamine tetraacetic acid tetrasodium salt (40%) : . Not bioaccumulative considering that BCF<100 and log Pow<3 - MSDS supplier

Mobility

Sodium hydroxide (50%) : air . Instantaneous degradation - MSDS supplier
Sodium hydroxide (50%) : water. . Important solubility and mobility - MSDS supplier
Sodium hydroxide (50%) : soil/sediments . Important solubility and mobility; Contamination of ground water in case of rain - MSDS supplier

Mix-related data :

Acute toxicity

fishes . Not determined
daphnia . Not determined
algae . Not determined

CHRONIC TOXICITY

. No data available.

Degradability

. The surface agents contained in this mix are in line with the requirements of the Detergent Regulation 648/2004/EC.

Bioaccumulation

. No data available.

Mobility

. No data available.

Conclusion :

The mixture is not considered to be dangerous for the environment according to 1272/2008/EC Regulation.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB

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12.6. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Treatment of the mixture :

Do not discharge the product directly to sewer or to environment.

Comply with Directive 2008/98/EC of 19/11/2008 relating to waste and to Decision 2000/532/EC (amended ultimately by Decision 2001/119/EC) that establishes a list of hazardous waste that must be taken to an approved centre.

Packaging treatment :

Rinse thoroughly the packaging with water and treat the effluent like wastes.

Comply with Directive 2008/98/EC of 19/11/2008 relating to waste and to Decision 2000/532/EC (amended ultimately by Decision 2001/119/EC) that establishes a list of hazardous waste that must be taken to an approved centre.

SECTION 14: Transport information

ROAD TRANSPORT:

Rail/Route (RID/ADR)

UN no : 1719

UN proper shipping name : CAUSTIC ALKALINE LIQUID, N.O.S. (Potassium hydroxide+Sodium hydroxide)

Class : 8

Packing group : II

Hazard code : 80

Label : 8



Tunnel code : E

Environmental hazard : No

Special precautions for user : No information.

MARITIME TRANSPORT :

IMDG

UN no :1719

UN proper shipping name : CAUSTIC ALKALINE LIQUID, N.O.S. (Potassium hydroxide+Sodium hydroxide)

Class : 8



Packing group : II

Marine pollutant : No

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Special precautions for user : No information.

EmS number : F-A, S-B

Comply with the provisions of the IMDG on the physical separation of materials.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code :

Not concerned

SECTION 15: Regulatory information

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

Regulations relating to the hazards from major accidents :

Directive 96/82/EC amended by Directive SEVESO 2 (2003/15/EC)

Regulations relating to the classification, packing and labelling of substances and mixes :

Regulation 1272/2008/EC amended, Directive 1999/45/EC amended.

Waste regulations :

Directive 2008/98/EC of 19/11/2008 relating to waste.

Decision 2000/532/EC amended which establishes the list of hazardous waste.

Protection of workers :

Directive 98/24/EC of 07/04/1998 on the protection of the health and safety of workers from the risks related to chemical agents at work.

Regulation 850/2004/EC on persistent organic pollutants and modifying Directive 79/117/EC : Not concerned

Regulation 2037/2000/EC on substances that deplete the ozone layer : Not concerned

Regulation (EC) 648/2004 :

In conformity with the regulation in force on detergents: Regulation (EC) N° 648/2004.

Ingredient datasheet for the medical staff is available upon written request.

Contains :

5-15% EDTA and salts thereof

< 5% Polycarboxylates

15.2. Chemical safety assessment

No

SECTION 16: Other information

The safety data sheet is additional to the technical data sheet but does not replace it. The information given here in is to the best of our knowledge correct and is given in good faith. We must also draw the user's attention on potential risks of the product is used for other purposes for which the product is known.

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In no way does it exempt users from being aware of and complying with regulations applicable to their activity. It is their sole responsibility to take all necessary precautions in accordance to the usage of the product they are aware of. Regulations are only stated in order to help users fulfill the duties involved in the use of the product. This description should not be considered as exhaustive. It does not exempt users from ensuring if other demands need to be complied with-according to other laws than the ones hereby stated and applicable to holding and usage of the product-demands for which they will remain sole responsibility.

Section(s) modified compared with the previous version :

Revision of the safety data sheet according to 453/2010/EC Regulation.

List of R phrases referred to in sections 2 and 3 :

R20/22 : Harmful by inhalation and if swallowed.

R22 : Harmful if swallowed.

R35 : Causes severe burns.

R41 : Risk of serious damage to eyes.

List of H phrases referred to in sections 2 and 3 :

H290 : May be corrosive to metals.

H302 : Harmful if swallowed.

H314 : Causes severe skin burns and eye damage.

H318 : Causes serious eye damage.

H332 : Harmful if inhaled.

Sources of key data used to compile the data sheet :

MSDS supplier

International limit values for chemical agents

Historical :

Version 5.0.0

Cancels and replaces previous version 4.2.5