SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : NU-COIL 101

Product code : 9069.

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

Alkaline detergent

1.3. Details of the supplier of the safety data sheet

Registered company name : ORAPI.

Address : PARC INDUSTRIEL DE LA PLAINE DE L'AIN - 225 ALLEE DES CEDRES.01150.SAINT-VULBAS.FRANCE.

Telephone : 33-(0)4-74-40-20-20. Fax : 33-(0)4-74-40-20-21.

fds@orapi.com

1.4. Emergency telephone number : 33-(0)1-45-42-59-59.

Association/Organisation : INRS .

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Substance that is corrosive to metals, Category 1 (Met. Corr. 1, H290).

Skin corrosion, Category 1A (Skin Corr. 1A, H314).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

Detergent mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :

GHS05

Signal Word :

DANGER

Product identifiers :

EC 215-181-3	POTASSIUM HYDROXIDE
EC 215-185-5	SODIUM HYDROXIDE
EC 200-573-9	TETRASODIUM ETHYLENE DIAMINE TETRAACETATE

Hazard statements :

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

Precautionary statements - Prevention :

P234	Keep only in original container.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

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 [or shower].
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.
P390	Absorb spillage to prevent material damage.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: 019_002_00_8 CAS: 1310-58-3 EC: 215-181-3 REACH: 01-2119487136-33 POTASSIUM HYDROXIDE	GHS06, GHS05 Dgr Met. Corr. 1, H290 Acute Tox. 3, H301 Skin Corr. 1A, H314	[1]	10 <= x % < 25
INDEX: 011_002_00_6 CAS: 1310-73-2 EC: 215-185-5 REACH: 01-2119457892-27 SODIUM HYDROXIDE	GHS05 Dgr Met. Corr. 1, H290 Skin Corr. 1A, H314	[1]	2.5 <= x % < 10
INDEX: 0706 CAS: 64-02-8 EC: 200-573-9 REACH: 01-2119486762-27 TETRASODIUM ETHYLENE DIAMINE TETRAACETATE	GHS07, GHS05, GHS08 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Acute Tox. 4, H332 STOT RE 2, H373		2.5 <= x % < 10
INDEX: 012 CAS: 6419-19-8 EC: 229-146-5 REACH: 01-2119487988-08 ACIDE NITRILOTRIMETHYLENETRIPHOSPHONIQUE	GHS05 Wng Met. Corr. 1, H290 Eye Irrit. 2, H319		2.5 <= x % < 10
INDEX: 1002 CAS: 7320-34-5 EC: 230-785-7 REACH: 01-2119489369-18 PYROPHOSPHATE TETRAPOTASSIQUE	GHS07 Wng Eye Irrit. 2, H319		2.5 <= x % < 10
INDEX: 607-620-00-6 CAS: 5064-31-3 EC: 225-768-6 REACH: 01-2119519239-36 TRISODIUM NITRILOTRIACETATE	GHS08, GHS07 Wng Carc. 2, H351 Acute Tox. 4, H302 Eye Irrit. 2, H319	[2]	0 <= x % < 2.5

Information on ingredients :

[1] Substance for which maximum workplace exposure limits are available.

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Remove any soiled or splashed clothing immediately.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In contact with skin, rinse with water for at least 15 minutes. Consult a doctor.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- powder
- carbon dioxide (CO_2)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO_2)
- nitrogen oxide (NO)
- nitrogen dioxide (NO_2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

If the spill is large, evacuate all personnel and only allow intervention by trained operators equipped with safety equipment.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Neutralise with an acidic decontaminant.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Keep the container away from heat, bad weather, dampness and freezing.

Keep away from powerful oxidizing agent, strong acids, aluminium, alkaline and alkaline earth metals.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1310-58-3			2 mg/m3		
1310-73-2			2 mg/m3		

- France (INRS - ED984 :2012) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
1310-58-3	-	-	-	2	-	-
1310-73-2	-	2	-	-	-	-

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
1310-58-3		2 mg/m3			
1310-73-2		2 mg/m3			

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

SODIUM HYDROXIDE (CAS: 1310-73-2)

Final use:	**Workers.**
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	1 mg of substance/m3

Final use:	**Consumers.**
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	1 mg of substance/m3

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Natural latex
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Wear suitable protective clothing, in particular overalls and boots. These items must be kept in good condition and cleaned after use.

Suitable type of protective boots :

In the event of minor spatter, wear protective boots or half-boots against chemical risks in accordance with standard EN13832-2.

In the event of prolonged contact, wear boots or half-boots with liquid-chemical-resistant and waterproof soles and uppers in accordance with standard EN13832-3.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Ensure a sufficient ventilation.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Fluid liquid.
Color : amber	

Important health, safety and environmental information

pH :	Not stated. Strongly basic.
Boiling point/boiling range :	Not specified.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	1.24
Water solubility :	Soluble.
Melting point/melting range :	Not specified.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

Mixture which by chemical action can corrode and even destroy metals.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Avoid :

- frost
- heat

10.5. Incompatible materials

Keep away from :

- acids
- oxidising agents
- water
- aluminium
- alkali metals
- alkaline earth metals
- chlorinated hydrocarbons

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)
- nitrogen oxide (NO)
- nitrogen dioxide (NO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure for up to three minutes.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

11.1.1. Substances

Acute toxicity :

ACIDE NITRILOTRIMETHYLENETRIPHOSPHONIQUE (CAS: 6419-19-8)

Oral route :	LD50 = 2910 mg/kg Species : Rat

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Oral route :	LD50 = 1780 mg/kg
Inhalation route (Dusts/mist) :	1 < LC50 <= 5 mg/l Species : Rat

POTASSIUM HYDROXIDE (CAS: 1310-58-3)

Oral route :	LD50 = 273 mg/kg Species : Rat

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Fish toxicity :	LC50 > 100 mg/l Duration of exposure : 96 h
Crustacean toxicity :	EC50 > 500 mg/l Species : Daphnia magna Duration of exposure : 24 h
Algae toxicity :	ECr50 > 100 mg/l Duration of exposure : 72 h

SODIUM HYDROXIDE (CAS: 1310-73-2)

Fish toxicity :	LC50 = 125 mg/l Species : Gambusia affinis Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 76 mg/l Species : Daphnia magna Duration of exposure : 48 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

TETRASODIUM ETHYLENE DIAMINE TETRAACETATE (CAS: 64-02-8)

Biodegradability :	Non-rapidly degradable.

SODIUM HYDROXIDE (CAS: 1310-73-2)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2017 - IMDG 2016 - ICAO/IATA 2017).

14.1. UN number

3266

14.2. UN proper shipping name

UN3266=CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.

(potassium hydroxide, sodium hydroxide)

14.3. Transport hazard class(es)

- Classification :

8

14.4. Packing group

II

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C5	II	8	80	1 L	274	E2	2	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	8	-	II	1 L	F-A,S-B	274	E2

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	II	851	1 L	855	30 L	A3 A803	E2
	8	-	II	Y840	0.5 L	-	-	A3 A803	E2

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

- Labelling for detergents (EC Regulation No. 648/2004,907/2006) :

- less than 5 % : phosphates
- less than 5 % : phosphonates
- less than 5 % : EDTA and salts thereof

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

The use of the preparation is restricted to professional users.

Modifications brought with regard to the previous version :

- Passage CLP

Wording of the phrases mentioned in section 3 :

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302 + H332	Harmful if swallowed or if inhaled.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H351	Suspected of causing cancer .
H373	May cause damage to organs through prolonged or repeated exposure .

Abbreviations :

DNEL : Derived No-Effect Level

CMR: Carcinogenic, mutagenic or reprotoxic.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS05 : Corrosion