FOURTRESS DAIRY WASH
Code: HDD20

Safety Data Sheet compliant with Regulation (EU) 2020/878

Version 7.0.0
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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: FOURTRESS DAIRY WASH

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

Use of the product

LIQUID ALKALI
DAIRY HYGIENE
Routine use Chlorinated Caustic Detergent

Uses advised against: The product must not be used for purposes other than those specified above and in the Product Data Sheet, without first obtaining written handling instructions from the supplier

1.3. Details of the supplier of the safety data sheet

Company identification

Dairy Direct Ltd
Kilmanagh, Co. Kilkenny
Ireland
Fourtress Dairy Hygiene Ltd
10 St Marys Place,
Bury BL9 7BA

1.4. Emergency telephone number

Emergency phone number

CARECHEM 24 Great Britain
Tel. +44 1865 407333

NHS : 111

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Substance corrosive to metals - Category 1	H290: May be corrosive to metals.
Skin corrosion - Category 1A	H314: Causes severe skin burns and eye damage.
Serious damage to eyes - Category 1	H318: Causes serious eye damage.
Hazardous to the aquatic environment — Acute - Category 1	H400: Very toxic to aquatic life.
Hazardous to the aquatic environment — Chronic - Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to 1272/2008/EC Regulation:

Hazard pictograms(s) :



Signal word :
Danger

Contains : Sodium hydroxide+ Sodium hypochlorite

Hazard statement(s) :
H290: May be corrosive to metals.
H314: Causes severe skin burns and eye damage.
H410: Very toxic to aquatic life with long lasting effects.
EUH 031: Contact with acids liberates toxic gas.

Precautionary statement(s) :
P234: Keep only in original packaging.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
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.
P313: Get medical advice/attention.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

The mixture does not contain substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. in concentration greater than 0.1%.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable as this involves a mixture.

3.2. Mixtures

Chemical nature of the mixture : LIQUID ALKALI

Substance(s)	CAS number(s)	EINECS number(s)	index	No registration REACH	Classification according to Regulation (EC) 1272/2008	SCL M-factor ATE	Type
10% <= Sodium hydroxide < 15%	1310-73-2	215-185-5	011-002-00-6	UK-01-6126796028-6	Skin Corr. 1A H314 Met. Corr. 1 H290	C ≥ 5% Skin Corr. 1A H314 2% ≤ C < 5% Skin Corr. 1B H314 0.5% ≤ C < 2% Skin Irrit. 2 H315 Eye Irrit. 2 H319	(1)
1% <= Sodium hypochlorite < 5%	7681-52-9	231-668-3	017-011-00-1	UK-01-1874465138-3	Met. Corr. 1 H290 Skin Corr. 1B H314 STOT SE 3 H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 EUH 031 Eye Dam. 1 H318	C ≥ 5% EUH 031 M Factor (Acute) 10 M Factor (Chronic) 1	(1)

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
(12) : Other substance considered hazardous to health or the environment
(N) : Nanomaterial
(M) : Microorganisms

Full text of 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.
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 :
Take off immediately all contaminated clothing.
Wash immediately with plenty of water for 15 minutes at least.
If any sign of irritation appears, consult a dermatologist.

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.
Immediately consult an ophtalmologist, even in the absence of apparent damages.

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.

Inhalation : May cause a respiratory system 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

Corrosive vapours
The contact with common metals (steel, galvanized metals , aluminium) can cause corrosion and produce very flammable hydrogen gas.
FOURTRESS DAIRY WASH is non-flammable.

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 :
Collect in a boltable container; clean the contaminated zone with water and to air.
Absorb with such materials as: Sand. Vermiculite.

Large spillage :
Never return spills in original containers for re-use.
Keep in suitable, properly labelled and closed containers for disposal.
Mark out and contain using a, inert, non-combustible absorbent material, such as sand, earth, vermiculite or diatomaceous earth and recover in an emergency tank.

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

Do not breathe vapour.
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.
Operate in a well ventilated place.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Storage :

Do not store with oxidizing or acidic substances.
Do not store in metal sensitive to corrosion.
Keep only in the original container.
Keep away from products sensitive to chlorinated alkalis.
Keep container closed.
Keep in a cool place.

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	CAS number	Country	Type	Value	Unit	Comments	source
Sodium hydroxide	1310-73-2	GBR	OEL Short term	2	mg/m³		International limit values for chemical agents

8.2. Exposure controls

According to the requirements of Directive 98/24 /EC, the employer is required to conduct a risk assessment and implement appropriate risks management measures.
* For any situation where the absence of risk is not proven, he must consider the substitution or reduction of risk by improving in priority processes used and collective protection measures. The effectiveness of the solutions implemented will be checked by measurement in comparison to the statutory limit values for substances defined in

Section 8.1.
* If the risk remains after these corrective actions, he must always check by routinely measuring compliance with regulatory OEL if they exist in section 8.1 and apply all the individual protective measures given in section 8.2.
* When formalized risk assessment indicates a low risk to workers' health, control of compliance with regulatory OEL may not be considered and all individual protection measures is not always mandatory.

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 :

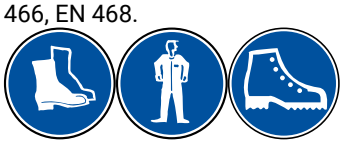
Eye/face protection :
Use safety glasses or facial screen in conformity with the EN ISO 16321-1 standard.



Hand protection :
Gloves in protection class 3 or above are recommended for brief contact (changeover time more than sixty minutes under standard EN 374).
Latex
Use chemical resistant gloves approved to EN 374.
Butyl rubber.
Nitrile rubber.
Neoprene.
PVC



Skin protection :
Wear boots and a protective cloth with chemical resistance.
Wear suitable protective footwear (EN 13832) when applying the product
To choose the means of body protection according to the activity and the type of exposure, for example: apron, boots, combination of protection against the chemicals conform to the standards EN 465, EN 466, EN 468.



Respiratory protection :
None under normal conditions of use.
If the handling of the product produces aerial particles, wear an approved mask fitted with a P3 particle filter and adhere to the manufacturer's instructions.
P3: Particles, solid aerosols and liquids



Thermal hazards :
Not applicable

Health measures :
Safety shower and eye wash fountain near to workplace.
After using, wash systematically all personal protective equipment.

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

Appearance	Clear liquid
Colour	Pale yellow
Odour	bleach
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Not applicable
Lower explosive limit	Not applicable
upper explosive limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
pH value at 10g/l	12 - 13
Pure pH	> 13
kinematic viscosity	Not available
Solubility	*Convenient and fast application
Partition coefficient: n-octanol/water	Not available
Vapour pressure	Not available
Relative density	1.2
Mass density (20°C)	1.2 g/cm³
Vapour density	Not available
Particle characteristics	Not applicable

9.2. Other information

Explosive properties	Not applicable
Oxidising properties	Not available
Evaporation rate:	Not available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None under normal conditions of use.

10.2. Chemical stability

Stable in the recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Avoid contact with flammable materials.
Thermal decomposition gives Oxygen, that can enhance sites of combustion. Hazards of overpressurization in containers exposed to heat : explosion risk.
In the presence of metals, risk of emission of oxygen.
Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Avoid contact with acids, metals, reducing agents, organic matters and flammable substances.
Light, heat.

10.5. Incompatible materials

Light metals and/or colored.
Acids.

10.6. Hazardous decomposition products

Contact with acids liberates gaseous chlorine.
In contact with certain metals (aluminium, zinc...), release of flammable and/or explosive hydrogen if ignited.

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 hazard classes as defined in Regulation (EC) N°1272/2008

Substance-related data:

Acute toxicity
Sodium chlorate + Sodium hydroxide + Sodium hypochlorite + Sodium carbonate (15%) : LD 50 - oral male rat (OECD 401): 1,100 mg/kg. - MSDS supplier
Sodium chlorate + Sodium hydroxide + Sodium hypochlorite + Sodium carbonate (15%) : LD 50 - dermal rabbit (OECD 402): > 20,000 mg/kg. - MSDS supplier
Sodium chlorate + Sodium hydroxide + Sodium hypochlorite + Sodium carbonate (15%) : LC 50 - inhalation - 1hours male rat (OECD 403): 10.5 mg/L. - MSDS supplier

Skin corrosion/irritation
Sodium hydroxide (50%) : Skin corrosion/irritation . Causes severe burns. - MSDS supplier

Serious damage to eyes/eye irritation
Sodium hydroxide (50%) : Eye contact : . corrosive to the eyes - MSDS supplier
Sodium hydroxide (50%) : Serious damage to eyes/eye irritation . corrosive to the eyes - MSDS supplier

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

Sensitisation
Sodium hypochlorite (15%) : guinea-pig (OECD 406 Buehler assay): . Not sensitising - MSDS supplier

Mutagenicity
Sodium hydroxide : . Not mutagenic - MSDS supplier

Carcinogenicity
Sodium hydroxide : mouse . Not carcinogenic - MSDS supplier

Specific target organ toxicity - repeated exposure
Sodium hypochlorite (15%) : NOAEL - oral - 90days male rat (OECD 408): 50 mg/kg bw day. - MSDS supplier
Sodium hypochlorite (15%) : NOAEL - oral - 90days female rat (OECD 408): 57.2 mg/kg bw day. - MSDS supplier
Sodium hypochlorite (15%) : LOAEL- inhalation - 30days rat (OECD 412): ≤ 3 mg/m³. - MSDS supplier

Mix-related data: :

Acute toxicity
. Not determined for the mixture.

Skin corrosion/irritation
Skin corrosivity . The mix is considered to be corrosive for the skin under the criteria of Regulation 1272/2008/EC.

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

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

Mutagenicity
. based on available data, the classification criteria are not met.

Carcinogenicity
. based on available data, the classification criteria are not met.

Reproductive toxicity
. based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure
. based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure
. based on available data, the classification criteria are not met.

Aspiration hazard

. based on available data, the classification criteria are not met.

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.

Inhalation : May cause a respiratory system irritation.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Not concerned

SECTION 12: ECOLOGICAL INFORMATION

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

Substance-related data:

Acute toxicity
Sodium hydroxide : LC 50 - 96 h fishes (Gambusia affinis) 35 - 189 mg/L. - MSDS supplier
Sodium hypochlorite (15%) : LC 50 - 96hours fishes 0.06 mg/L. - MSDS supplier
Sodium hypochlorite (15%) : EC 50 - 48hours daphnia (Daphnia magna) (OECD 202): 141 µg/l. - MSDS supplier
Sodium hypochlorite (15%) : EC 50 (Algae (fresh water)) 0.1 mg/L. - MSDS supplier

Chronic toxicity
Sodium hypochlorite (15%) : NOEC - 28days fishes (Menidia peninsulae) 0.04 mg/L. - MSDS supplier
Sodium hypochlorite (15%) : NOEC shellfishes 0.007 mg/L. - MSDS supplier
Sodium hypochlorite (15%) : NOEC (Algae (fresh water)) 0.002,1 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

Bioaccumulation
Sodium hydroxide (50%) : . Not applicable - 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 . No data available.
daphnia . No data available.
algae . No data available.

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 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

12.6 Endocrine disrupting properties

Not concerned

12.7. 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 amended, relating to waste and to Decision 2000/532/EC (amended ultimately by Decision 2014/955/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 amended, relating to waste and to Decision 2000/532/EC (amended ultimately by Decision 2014/955/EC) that establishes a list of hazardous waste that must be taken to an approved centre.

SECTION 14: TRANSPORT INFORMATION

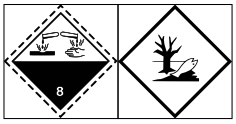
ROAD TRANSPORT: Rail/Route (RID/ADR)

14.1 UN number or ID number : 1719

14.2 UN proper shipping name :
CAUSTIC ALKALI LIQUID, N.O.S. (Sodium hydroxide + Sodium hypochlorite)

14.3 Transport hazard class(es) : 8

14.4 Packing group : II
Hazard identification number : 80
Label : 8



Tunnel code : (E)

14.5 Environmental hazards : Yes (Sodium hypochlorite)

14.6 Special precautions for user : No information.

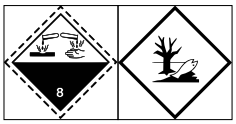
Limited Quantity (QL): 1L

MARITIME TRANSPORT : IMDG

14.1 UN number or ID number :1719

14.2 UN proper shipping name : CAUSTIC ALKALI LIQUID, N.O.S. (Sodium hydroxide + Sodium hypochlorite)

14.3 Transport hazard class(es) : 8



14.4 Packing group : II

14.5 Environmental hazards
Marine pollutant : Yes (Sodium hypochlorite)

14.6 Special precautions for user : No information.
EmS number : F-A, S-B
IMDG segregation group (SGG18) - segregation code (SG22 - SG35)

Limited Quantity (QL): 1L

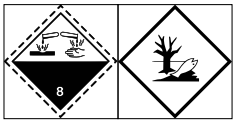
14.7 Maritime transport in bulk according to IMO instruments : Not concerned

AIR TRANSPORT : IATA

14.1 UN number or ID number :1719

14.2 UN proper shipping name : CAUSTIC ALKALI LIQUID, N.O.S. (Sodium hydroxide + Sodium hypochlorite)

14.3 Transport hazard class(es) : 8



14.4 Packing group : II

Packing instruction Limited quantities passengers and cargo aircraft : Y840
Limited Quantities passagers and cargo aircraft : 0.5L

Packing instruction passengers and cargo aircraft : 851
Max. net quantity passengers and cargo aircraft : 1L

Packing instruction cargo aircraft : 855
Max. net quantity cargo aircraft : 30L

Special provisions : A3 A803

ERG code : 8L

SECTION 15: REGULATORY INFORMATION

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

Regulation (EU) n°528/2012 concerning the making available on the market and use of biocidal products :
Not concerned

Regulations relating to the hazards from major accidents :
SEVESO 3 Directive (2012/18/EC) : 41

Regulations relating to the classification, packaging and labelling of substances and mixtures :
Regulation (EC) 1272/2008 amended.

Waste regulations :
2008/98/EC Directive amended by 2015/1127/EC Directive - Regulation 1357/2014/EC
Decision 2014/955/EC which establishes the list of hazardous waste.

Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals : Not concerned

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 (EU) 2019/1021 of 20 June 2019 on persistent organic pollutants : Not applicable

Regulation (EC) 1005/2009 amended on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors:
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% Chlorine-based bleaching agents, Polycarboxylates, Phosphonates

Comply with national and local legislation.

UN Globally Harmonised System (GHS) on Classification and Labelling of Chemical (GB CLP - SI 2020 No. 1567) and UK REACH (SI 2020 No. 1577)

15.2. Chemical safety assessment

This safety data sheet has been drafted taking into account the information from exposure scenarios for the substances making up the mixture.

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.
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.

Safety Data Sheet compliant with Regulation (EU) 2020/878

The classification of this product has been established in accordance with Regulation (EC) 1272/2008 (CLP) and associated guidance, on the basis of the data available for the substances, mixture and/or calculation method and/or expert judgement.

Section(s) modified compared with the previous version :
Not concerned

List of H phrases referred to in section 3 :
EUH 031 : Contact with acids liberates toxic gas.
H290 : May be corrosive to metals.
H314 : Causes severe skin burns and eye damage.
H318 : Causes serious eye damage.
H335 : May cause respiratory irritation.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.

Sources of key data used to compile the data sheet :
MSDS supplier
International limit values for chemical agents

Historical :
Version 7.0.0
Cancels and replaces previous version .