



FOURTRESS DESCALE

Code: 00G90

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

Version 7.0.0

Creation date : 13/12/22

Revision: 03/01/24

Print Date : 03/04/24

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

1.1. Product identifier

Trade name FOURTRESS DESCALE

UFI : 29HH-F088-G00A-5F1Y

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

Use of the product

ACID LIQUID
ACIDIC CIRCULATION DESCALER
Routineuse acidic circulation descaler

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
Tel. +44 1865 407333

For information or to report a poisoning incident contact The National
Poisons Information Centre:
+353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week).
Healthcare Professionals:
+353 (1) 809 2566 (24 hour service)
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.

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Substance corrosive to metals - Category 1

H290: May be corrosive to metals.

Acute toxicity - Category 4 (per oral route)

H302: Harmful if swallowed.

Skin corrosion - Category 1A

H314: Causes severe skin burns and eye damage.

Serious damage to eyes - Category 1

H318: Causes serious eye damage.

2.2. Label elements

Labelling according to 1272/2008/EC Regulation:

Hazard pictograms(s) :



Signal word :

Danger

Contains : Phosphoric Acid

Hazard statement(s) :

H290: May be corrosive to metals.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

Precautionary statement(s) :

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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.

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

2.3. Other hazards

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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 : ACID LIQUID

Substance(s)	CAS number(s)	EINECS number(s)	index	No registration REACH	Classification according to Regulation (EC) 1272/2008	SCL M-factor ATE	Type
35% < Phosphoric Acid < 40%	7664-38-2	231-633-2	015-011-00-6		Skin Corr. 1B H314 Met. Corr. 1 H290 Acute Tox. 4 (oral) H302	C ≥ 25% Skin Corr. 1B H314 10% ≤ C < 25% Skin Irrit. 2 H315 Eye Irrit. 2 H319	(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

(12) : Other substance considered hazardous to health or the environment

(N) : Nanomaterial

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 :

To transport the person to the air, to maintain it with the heat and rest.

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

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.



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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.

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 :

Do NOT induce vomiting.

Rinse mouth.

Does not have to come into contact with food, nor to be introduced.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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 : Inhaling vapours or aerosols can irritate respiratory tracts, including irritation of the nose and throat, a cough and difficulty breathing.

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 :

Adapt the extinction agent to the environment

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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FOURTRESS DESCALE is non-flammable.

However, in contact with certain metals (aluminium, zinc...), release of flammable and/or explosive hydrogen if ignited.

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.

Wear suitable protective clothing.

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.

Take as soon as possible all incompatible materials away.

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

Informing the authorities if the product penetrates in the sewers or in the waters of the public domain.

6.3. Methods and material for containment and cleaning up

Small spillage :

Absorb with an inert, non-combustible absorbent material, such as sand, earth, vermiculite or diatomaceous earth.

Large spillage :

Mark out, soak up with an inert absorbant and pump in an emergency tank.

Keep in suitable, properly labelled and closed containers for disposal.

Never return spills in original containers for re-use.

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

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Do not eat, drink or smoke in work area. Avoid projections during use.

Do not breathe mist/vapours/spray.

Wear suitable protective clothing.

Avoid contact with skin, eyes and clothing.

Operate in a well ventilated place.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Storage :

Keep container closed.

Keep only in the original container.

Store in a dry and temperate place, safe from the light and frost.

Keep away from incompatible matters (see heading 10).

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
Phosphoric Acid	7664-38-2	IRL	OEL 8h	1	mg/m ³		International limit values for chemical agents
			OEL Short term	2	mg/m ³	15 minutes reference period	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 :

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Ensure adequate ventilation.

Apply the necessary technical measures to comply with the professional exposure limit values.

Corrosive product : avoid contact with skin and mucous membranes, avoid splashings.

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 16321 standard.



Hand protection :

Use chemical resistant gloves approved to EN 374.

Do not wear polyvinyl alcohol (PVA) gloves.

Examples of preferred materials for insulating gloves:

Butyl rubber.

Nitrile rubber.

Neoprene.

PVC

Thickness: > 0.7 mm

In the event of important contact (prolonged direct exposure): gloves of index of protection 6, corresponding to one duration of permeation > 480 min according to the standard EN 374 are advised.



Skin protection :

Wear boots and a protective cloth with chemical resistance.

In weak spraying, wear boots or half-boots which protect from chemical risk that comply with standard NF EN 13832-2.



Respiratory protection :

At the time of handling leading to vapor formation, wear a half-mask in compliance with the European standard EN 140 or a complete mask with a filter in conformity with the European standard EN 136 (in conformity with the European standard EN 141 or EN 14387) of type:

Filtration type B-P

P2: Particles, solid aerosols and liquids

When the values limit exposure and/or the values of comfort are likely to be exceeded, to use an apparatus of respiratory protection adequate purifying the air.



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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	Colourless to pale yellow
Odour	Acid, sharp
Odour threshold	Not available
Melting point	Not applicable
Freezing point	Not available
Boiling point	Not available
Flammability	Not available
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	1.9 - 2.2
Pure pH	< 1
kinematic viscosity	Not available
Solubility	*Convenient and fast application
Partition coefficient: n-octanol/water	Not available
Vapour pressure	Not available
Relative density (20°C)	1.2 - 1.25
Mass density	1.2 - 1.25 g/cm³
Vapour density	Not available
Particle characteristics	Not applicable

9.2. Other information

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

SECTION 10: STABILITY AND REACTIVITY

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10.1. Reactivity

None under normal conditions of use.

Hazards linked to exothermal reactions.

10.2. Chemical stability

Stable in the recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

Reaction with sodium hypochlorite

Not to mix with sodium hypochlorite (bleach) or another product of bleaching. The mixture which would result from this would cause a violent exothermic reaction, followed by a release of chlorine gas.

10.4. Conditions to avoid

Excessive heat (>50°C)

10.5. Incompatible materials

Sodium hypochlorite

Light metals and/or colored.

10.6. Hazardous decomposition products

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

Contact with acids liberates gaseous chlorine.

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

Phosphoric Acid (81.5%) : ATE (orally) 500 - 2,000 mg/kg. - MSDS supplier

Serious damage to eyes/eye irritation

Phosphoric Acid (100%) : Serious damage to eyes/eye irritation rabbit . Corrosive. - 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.



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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 sensitizer according to 1272/2008/EC Regulation.

Respiratory sensitisation . 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 : Inhaling vapours or aerosols can irritate respiratory tracts, including irritation of the nose and throat, a cough and difficulty breathing.

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:

Not available

Mix-related data:

Acute toxicity

fishes . No data available.



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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 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

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 : 1805

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14.2 UN proper shipping name :
PHOSPHORIC ACID, SOLUTION

14.3 Transport hazard class(es) : 8

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



Tunnel code : (E)

14.5 Environmental hazards : No

14.6 Special precautions for user : No information.

Limited Quantity (QL): 5L

MARITIME TRANSPORT : IMDG

14.1 UN number or ID number :1805

14.2 UN proper shipping name : PHOSPHORIC ACID, SOLUTION

14.3 Transport hazard class(es) : 8



14.4 Packing group : III

14.5 Environmental hazards
Marine pollutant : No

14.6 Special precautions for user : No information.
EmS number : F-A, S-B

Limited Quantity (QL): 5L

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



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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) : Not concerned

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 :
>30% Phosphates
< 5% Amphoteric surfactants

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)



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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.

Section(s) modified compared with the previous version :

Not concerned

List of H phrases referred to in section 3 :

H290 : May be corrosive to metals.

H302 : Harmful if swallowed.

H314 : Causes severe skin burns and eye damage.

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 .