

VIROLAC CONCENTRATE

Code: 071Y1

Material Safety Data Sheet compliant with Regulation (EC) 2015/830

Version **6.1.0**

Revision: **15/07/19**

Print Date : 26/07/19

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

1.1. Product identifier

Trade name VIROLAC CONCENTRATE

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

Use of the product

LIQUID ACID
UDDER HYGIENE
BEFORE AND AFTER MILKING

1.3. Details of the supplier of the safety data sheet

Company identification

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For information regarding this safety data sheet, please contact :
regulatory@kersia-group.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 NHS 111 or a doctor

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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Skin irritation - Category 2

H315: Causes skin irritation.

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 : L-(+)-lactic acid

Hazard statement(s) :

H315: Causes skin irritation.H318: Causes serious eye damage.

Precautionary statement(s) :

P280: Wear protective gloves/protective clothing/eye protection/face protection.P302 + P352: IF ON SKIN: Wash with plenty of soap and water.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.P332 + P313: If skin irritation occurs: Get medical advice/attention.

2.3. Other hazards

No additional information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

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Not applicable as this involves a mixture.

3.2. Mixtures

Chemical nature of the mixture : LIQUID ACID

Substance(s)	CAS number(s)	EINECS number(s)	No registration REACH	Classification according to Regulation 1272/2008/EC	Type
30% <= Propane-1,2-diol < 50%	57-55-6	200-338-0	01-2119456809-23	Not classified	(2)
10% <= L-(+)-lactic acid < 15%	79-33-4	201-196-2	01-2119474164-39	Eye Dam. 1 H318 Skin Irrit. 2 H315	(1)
1% <= Sodium etasulfate < 5%	126-92-1	204-812-8	01-2119971586-23	Skin Irrit. 2 H315 Eye Dam. 1 H318	(1)
1% <= 2-amino-2-methylpropanol < 5%	124-68-5	204-709-8	01-2119475788-16	Eye Dam. 1 H318 Skin Irrit. 2 H315 Aquatic Chronic 3 H412	(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

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.

In the event of contact with the skin :

Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.

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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.

Get medical advice.

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

Skin contact : Causes skin irritation.

Eye contact : Causes serious eye damage.

Ingestion : May cause digestive troubles.

Inhalation : Not considered as hazardous through inhalation under normal conditions of use.

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

VIROLAC CONCENTRATE 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.

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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.

6.3. Methods and material for containment and cleaning up

Small spillage :

Wash with plenty of water.

Large spillage :

Never return spills in original containers for re-use.

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

Mark out, soak up with an inert absorbant and pump 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 eat, drink or smoke in work area. Avoid projections during use.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Storage :

Keep only in the original container.

Keep protected from frost.

Keep container closed.

7.2.2. Packaging or wrapping materials :

High density polyethylene recommended.

7.3. Specific end use(s)

VIROLAC CONCENTRATE is for use as a biocide.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values :

Substance	Country	Type	Value	Unit	Comments	source
Propane-1,2-diol	GBR	OEL 8h	150	ppm		International limit values for chemical agents
			474	mg/m ³		International limit values for chemical agents
		EMV (Exposure medium value) :	10	mg/m ³	(Brouillard)	MSDS supplier

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 :

Wear safety goggles compliant with standard EN 166.

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Hand protection :

Use chemical resistant gloves approved to EN 374.



Skin protection :

Wear boots and a protective cloth with chemical resistance.



Respiratory protection :

No special protection measure is required.

Thermal hazards :

Not applicable

Health measures :

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

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Appearance	Clear liquid
Colour	Dark blue
Odour	Agreeable
Odour threshold	Not available
Pure pH	3.2±0.5
pH value at 10g/l	Not available
Freezing point :	-19 °C
Boiling point	> 100 °C
Flash point	Not applicable
Evaporation rate:	Not available
Flammability	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Mass density	1.063±0.01 g/cm ³
Relative density	1.063±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	Not available
Viscosity	Not available
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2. Other information

No additional information.

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

None to our knowledge.

10.4. Conditions to avoid

Storage below the freezing point.

10.5. Incompatible materials

None to our knowledge.

10.6. Hazardous decomposition products

None to our knowledge in standard conditions of use.

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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

L-(+)-lactic acid : LC 50 - inhalation - 4h rat 7.94 mg/L. - MSDS supplier

Sodium etasulfate (42%) : LD 50 - oral rat 4,000 mg/kg. - MSDS supplier

L-(+)-lactic acid : LD 50 - oral rat 3,730 mg/kg. - MSDS supplier

L-(+)-lactic acid : LD 50 - dermal rabbit > 2,000 mg/kg. - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : LD 50 - oral male rat 2,900 mg/kg. - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : LD 50 - oral mouse 2,150 mg/kg. - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : LD 50 - dermal rabbit > 2,000 mg/kg. - MSDS supplier

2-amino-2-methylpropanol (90 %) : LD 50 - dermal rabbit > 2,000 mg/kg. - MSDS supplier

2-amino-2-methylpropanol (90 %) : LD 50 - oral rat 2,900 mg/kg. - MSDS supplier

L-(+)-lactic acid : LD 50 - oral guinea-pig 1,810 mg/kg. - MSDS supplier

Skin corrosion/irritation

L-(+)-lactic acid (80%) : Skin irritation . Irritating - MSDS supplier

Sodium etasulfate (42%) : Skin irritation . Irritating - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : Skin irritation . Irritating - MSDS supplier

2-amino-2-methylpropanol (90 %) : Cutaneous contact rabbit . Irritating - MSDS supplier

Serious damage to eyes/eye irritation

L-(+)-lactic acid (80%) : Eye irritation . Risk of serious damage of eyes - MSDS supplier

Sodium etasulfate (42%) : Eye irritation . Risk of serious damage of eyes - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : Eye irritation . Causes serious eye damage according to the criteria of Regulation 1272/2008/EC. - MSDS supplier

2-amino-2-methylpropanol (90%) : Eye irritation . Corrosive. - MSDS supplier

Sensitisation

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : Skin sensitisation mouse, guinea-pig . Not sensitising - MSDS supplier

2-amino-2-methylpropanol (90%) : Cutaneous contact guinea-pig (Draize-test): . Not sensitising - MSDS supplier

Mutagenicity

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : . Not mutagenic - MSDS supplier

Carcinogenicity

L-(+)-lactic acid (80%) : . Not carcinogenic - MSDS supplier

Mix-related data: :

Acute toxicity

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. Not determined

Skin corrosion/irritation

Skin irritation . The mixture is considered to be irritating to the skin according to the 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

. 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 : Causes skin irritation.

Eye contact : Causes serious eye damage.

Ingestion : May cause digestive troubles.

Inhalation : Not considered as hazardous through inhalation under normal conditions of use.

SECTION 12: Ecological information

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

Substance-related data:

Acute toxicity

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2-amino-2-methylpropanol (90%) : EC 50 - 24h daphnia (OECD 202): 65 mg/L. - MSDS supplier

L-(+)-lactic acid : EC 50 - 48h daphnia 240 mg/L. - MSDS supplier

L-(+)-lactic acid : LC 50 - 48h fishes 320 mg/L. - MSDS supplier

L-(+)-lactic acid : EC 50 algae 3,500 mg/L. - MSDS supplier

Sodium etasulfate (42%) : EC 50 > 1 mg/L. - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : LC 50 - 96h fishes 184 mg/L. - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : EC 50 - 48h daphnia (Daphnia magna) 193 mg/L. - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : EC 50 - 72h algae (Scenedesmus subspicatus) 565.5 mg/L. - MSDS supplier

2-amino-2-methylpropanol (90%) : LC 50 - 96h fishes 190 mg/L. - MSDS supplier

Degradability

L-(+)-lactic acid : Biodegradability . Easily biodegradable. - MSDS supplier

Sodium etasulfate (42%) : Biodegradability - 14days (OECD 301 D): > 60 %. Easily biodegradable. - MSDS supplier

Sodium etasulfate (42%) : Biodegradability . Surfactant(s) contained in this preparation comply with biodegradability criteria as defined in (EC) regulation n° 648/2004 on detergents. - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : Biodegradability - 28days (OECD 301F): 89.3 %. - MSDS supplier

Bioaccumulation

L-(+)-lactic acid : Log Pow - 0.72 . Not bioaccumulative - MSDS supplier

2-amino-2-methylpropanol + 2-Methylamino-2-methyl-1-propanol : Log Pow (OECD 107): - 0.63 . - MSDS supplier

Mix-related data :

Acute toxicity

fishes . Not determined

daphnia . Not determined

algae . Not determined

CHRONIC TOXICITY

. No data available.

Degradability

. No data available.

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.

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

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 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)

UN no :

UN proper shipping name :Not concerned

Transport hazard class(es) :

Packing group :

Hazard code :

Label :

Tunnel code :

Environmental hazard : No

Special precautions for user : No information.

Limited Quantity (QL):

MARITIME TRANSPORT :

IMDG

UN no :

UN proper shipping name : Not concerned

Transport hazard class(es) :

Packing group :

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Marine pollutant : No

Special precautions for user : No information.

EmS number :

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

Limited Quantity (QL):

Transport in bulk according to Annex II of MARPOL 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 :

SEVESO 3 Directive (2012/18/EC) : Not concerned

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

Regulation 1272/2008/EC 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.

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 applicable

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

Regulation (EC) 648/2004 :

Not concerned

Comply with national and local legislation.

15.2. Chemical safety assessment

No

SECTION 16: Other information

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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 :

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

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

H315 : Causes skin irritation.

H318 : Causes serious eye damage.

H412 : Harmful 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 6.1.0

Cancels and replaces previous version 6.0.2