NU-POWER KLEEN™

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

1.1. Product identifier

Product name	**NU-POWER KLEEN™**
Product code	**10770 / 10878 / 10879 / 10880**

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

Relevant identified uses	CLEANER AND DESCALER - Kitchen and Bathroom
Uses advised against	Not available

1.3. . Details of the supplier of the safety data sheet

Name	InnuScience SA (Pty) Ltd
Address	31 Avant-Garde Avenue, Northlands Deco Park New Market Road, North Riding, Gauteng 2169 South Africa
Telephone	+27 10 020 3456
Contact email	info.za@innuscience.com

1.4. Emergency telephone number

Telephone	Poison Information Center Johannesburg, South Africa +27 86 155 5777

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

This mixture is not classified as hazardous.

2.2. Label elements according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Danger symbol (GHS-ZA)	None
Signal word (GHS-ZA)	None
Hazardous ingredients	None
Hazard statements (GHS-ZA)	None
Precautionary statements	None

2.3. Other hazards

Adverse physicochemical, human health and environmental effects

This mixture is not classified as hazardous.

SECTION 3 : Composition/information on ingredients

Name	Product identification	%	Classification according to the United Nations GHS
L-(+)-lactic acid	CAS No. 79-33-4 EC No. : 201-196-2	1% ≤ C < 4%	Eye Dam. 1: H318 Skin Irrit. 2: H315
Citric acid	CAS No. 77-92-9 EC No. : 201-069-1	1% ≤ C < 3%	Eye Irrit. 2: H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4 : First aid measures

4.1. Description of first aid measures

General information	If you feel unwell, get medical attention or call a POISON CENTER.
Following inhalation	Move victim to fresh air. Get medical attention if you feel unwell.
Following skin contact	Wash skin with water and soap. If skin irritation occurs, get medical attention.
Following eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Following ingestion	Get medical attention if you feel unwell.
For emergency responders	No data available

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

Symptoms and effects: This mixture is not classified as hazardous.

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

Treat according to symptoms

SECTION 5 : Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media *:* Water, foam, carbon dioxide, chemical powder

5.2. Special hazards arising from the substance or mixture

No special hazard expected.

5.3. Advice for firefighters

In case of fire: Wear appropriate apparatus of breathing and protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes.
Wash hands thoroughly after handling.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Suck up spillage with suitable absorbent material. After collection rinse with copious amounts of water. Contact local authorities when discharging large quantities. Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Refer to sections: 7 safe handling, 8 for personal protective equipments, 13 for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes.
Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original packaging and in a well-ventilated place. Protected against direct sunlight. Avoid strong heat.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with critical values that require monitoring at the workplace (DE)
The product does not contain any relevant quantities of substances with limit values that are related to the workplace or to be monitored.

8.2. Appropriate engineering controls

Eyewash stations

8.3. Individual protection measures, such as personal protective equipment (PPE)

	Eye/face protection : No eye protection is required in general. Skin/hand protection : No hand protection is required in general. Wash hands thoroughly after handling. Protective gloves are recommended if the product is used for a long period of time. Respiratory protection : No respiratory protection is required in general.
Environmental exposure controls	Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Pink
Odour	Fresh
Odour threshold	Not determined
pH	3.5 - 4.0
Melting / Freezing point	0°C , since the product is based on water.
Boiling point	Approximately 100 °C, since the product is based on water.
Flash point	Not measured. The product does not contain flammable ingredients.
Evaporation rate (water = 1)	Not determined but similar to water.
Flammability	The product is not flammable.
Lower limit of flammability or explosive	Not relevant, since the product is not flammable.
Upper limit of flammability or explosive	Not relevant, since the product is not flammable.
Vapour pressure (mm Hg)	Similar to water, approximately 23.8 at 25°C.
Vapour density	Value not relevant for classification.
Relative density	1.03 - 1.04
Water solubility	Easily soluble in water.

Solubility in other Solvents	Not determined. The product is not expected to be diluted in solvents other than water.
Log Kow	Value not relevant for classification
Auto-inflammability temperature	Not relevant, since the product is based on water.
Decomposition temperature	Value not relevant for classification
Viscosity	200 - 350 cP
Explosive properties	The product does not present an explosion hazard.
Oxidizing properties	The product does not present an oxidizing hazard.

9.2. Other information

Cinematic viscosity	200 - 350 cSt/s

SECTION 10: Stability and reactivity

10.1. Reactivity

No known reactivity. The product is stable under normal use and storage.

10.2. Chemical stability

The product is chemically stable under normal ambient conditions (room temperature).

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Prolonged storage at temperatures above 40°C or direct light may alter the colour of the product.

10.5. Incompatible materials

Store away from strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

This product is not classified (the classification criteria are not met).
ATEmix calculated (oral) > 5000 mg/Kg
ATEmix calculated (dermal) > 5000 mg/Kg

Exposition	Measurement	Effective dose	Method
Substance: L-(+)-lactic acid - CAS No. : 79-33-4			
Oral	LD50	3730 mg/Kg (Rat)	-
Dermal	LD50	> 2000 mg/Kg (Rabbit)	-
Substance: Citric acid - CAS No. : 77-92-9			
Oral	LD50	5000 mg/Kg (Mouse)	-
Dermal	LD50	> 2000 mg/Kg	-

Skin corrosion/irritation

Not classified (the classification criteria are not met).

Serious eye damage/Irritation

Not classified (the classification criteria are not met). Not classified corrosive to the eyes by analogy to comparable products tested according to OECD test method 438.

Respiratory or skin sensibilisation
Not classified (the classification criteria are not met).

Germ cell mutagenicity
Not classified (the classification criteria are not met).

Carcinogenicity
Not classified (the classification criteria are not met).
Reproductive toxicity
Not classified (the classification criteria are not met).

STOT - single exposure
Not classified (the classification criteria are not met).

STOT - repeated exposure
Not classified (the classification criteria are not met).

Aspiration hazard
Not classified (the classification criteria are not met).

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity, LC50 (calculated): > 100 mg/l

Dose	Duration (h)/(d)	Species	Method
Substance: L-(+)-lactic acid - CAS No. : 79-33-4			
LC50: 320 mg/l	48h	Fish	-
EC50: 240 mg/l	48h	Daphnia pulex	-
EC50: 3500 mg/l	72h	Scenedesmus capricornutum	-
Substance: Citric acid - CAS No. : 77-92-9			
LC50: 440 mg/l	48h	Fish	-
LC50: 1535 mg/l	24h	Daphnia magna	-

12.2. Persistence and degradability

No information is available on the mixture.

Substance	CAS No.	Method	Result	Duration
L-(+)-lactic acid	79-33-4	OECD 301D	64%	28 days
Citric acid	77-92-9	OECD 301F	95%	28 days

12.3. Bioaccumulative potential

No information is available on the mixture.

Substance	CAS No.	Bioaccumulative potential	Species
L-(+)-lactic acid	79-33-4	logKow: -0.62	-
Citric acid	77-92-9	Not available	-

12.4. Mobility in soil

No information is available on the mixture.

Substance	CAS No.	Mobility in soil
L-(+)-lactic acid	79-33-4	logKow: -0.62
Citric acid	77-92-9	Not available

12.5. Other adverse effects

No other known adverse effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose in accordance with local and national regulations.

SECTION 14: Transport information

14.1 UN-Number

SANS, IMDG, IATA — Not regulated

14.2 UN proper shipping name

SANS, IMDG, IATA — Not regulated

14.3 Transport hazard class(es)

SANS, IMDG, IATA — Not regulated

14.4 Packing group

SANS, IMDG, IATA — Not regulated

14.5 Environmental hazards:

Marine pollutant: — No

14.6 Special precautions for user — Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code — Not applicable

SECTION 15: Regulatory information

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

Classification and labeling information in section 2:
The following regulations have been taken into account: According to SANS 10234:2019 and SANS 11014:2010.

SECTION 16: Other information

16.1. Indication of changes (Additions, Deletions, Revisions)

Creation date: 21/05/2020
Revision date: 16/03/2021
Version: 3

16.2. Key or legend to abbreviations and acronyms

ADR: European Agreement concerning the international carriage of dangerous goods by road.
CAS No.: Chemical Abstract Service Number.
CLP: Classification, Label, Package
EC No.: European Commission Number
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods code
PBT: Persistent, bioaccumulative, toxic
UN: UN Number
vPvB: Very Persistent, very Bioaccumulative

16.3. List of relevant hazard statements and/or precautionary statements. (Full text of any statements which are not written out in full under section 2 to 15)

Hazard statements (H):

H315 : Causes skin irritation
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.

16.6. Advice on any training appropriate for workers to ensure protection of human health and the environment

No data available

The information given in this Safety Data Sheet is based on our present knowledge and on the South Africa regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.