

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 19.01.2024

Version number: 1

Revision: 21.02.2023

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

- **1.1 Product identifier**
- **Trade name:** **LECTRO KLEEN NF**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Life cycle stages IS** Use at industrial Sites
- **Sector of Use SU3** Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category PC35** Washing and cleaning products (including solvent based products)
- **Article category AC30** Other articles with intended release of substances
- **Technical function** Cleaning agent
- **Application of the substance / the mixture** Degreasing agent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Spanjaard (Pty) Ltd.
748-750 Fifth Street, Wynberg
Sandton, SOUTH AFRICA, 2090
Tel: +27 11 386 7100
- **Further information obtainable from:**
Clinton Palmer - Operations Executive
clinton@spanjaard.biz
- **1.4 Emergency telephone number:** NCEC: +44 1865 407333

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



- Acute Tox. 4 H302 Harmful if swallowed.
- Acute Tox. 4 H332 Harmful if inhaled.
-
- Aerosol 3 H229 Pressurised container: May burst if heated.
- Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS07
- **Signal word** Warning
- **Hazard-determining components of labelling:**
trans-dichloroethylene
- **Hazard statements**
H229 Pressurised container: May burst if heated.
H302+H332 Harmful if swallowed or if inhaled.
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

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- P103 Read carefully and follow all instructions.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P251 Do not pierce or burn, even after use.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:**
 5 % by mass of the contents are flammable
 - **2.3 Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 156-60-5	trans-dichloroethylene	50-75%
EINECS: 205-860-2	 Flam. Liq. 2, H225	
Index number: 602-026-00-3	 Acute Tox. 4, H302; Acute Tox. 4, H332	
RTECS: KV 9400000	Aquatic Chronic 3, H412	

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

· Non-hazardous components

CAS: 811-97-2	norflurane	15-25%
EINECS: 212-377-0		
CAS: 460-73-1	1,1,1,3,3-Pentafluoropropane (R245fa)	10-15%

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
 Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
 Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
 In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

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- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

156-60-5 trans-dichloroethylene

MAK (Germany)	Long-term value: 800 mg/m ³ , 200 ppm
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811-97-2 norflurane

WEL (Great Britain)	Long-term value: 4240 mg/m ³ , 1000 ppm
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AGW (Germany)	Long-term value: 4200 mg/m ³ , 1000 ppm 8(II);DFG, Y
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- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.

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· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Suitable respiratory protective device recommended.

· Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection Not required.

* SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties**· General Information****· Physical state**

Aerosol

· Colour:

Colourless

· Odour:

Ether-like

· Odour threshold:

Not determined.

· Melting point/freezing point:

Undetermined.

· Boiling point or initial boiling point and boiling range

-40 °C

· Flammability

Not applicable.

· Lower and upper explosion limit**· Lower:**

9.7 Vol %

· Upper:

12.8 Vol %

· Flash point:

Not applicable, as aerosol.

· Auto-ignition temperature:

440 °C

· Decomposition temperature:

Not determined.

· pH

Not determined.

· Viscosity:**· Kinematic viscosity**

Not determined.

· Dynamic:

Not determined.

· Solubility**· water:**

Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure at 20 °C:

5,716 hPa

· Density and/or relative density**· Density at 20 °C:**1.3 g/cm³**· Relative density**

Not determined.

· Vapour density

Not determined.

· 9.2 Other information**· Appearance:****· Form:**

Compressed liquefied gas

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- **Important information on protection of health and environment, and on safety.**
- **Ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Not determined.
- **Solvent content:**
- **Organic solvents:** 61.0 %
- **VOC (EC)** 100,00 %
- **Solids content:** 0.0 %
- **Change in condition**
- **Evaporation rate** Not applicable.

- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Pressurised container: May burst if heated.
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
 - Reacts with alkaline metals.
 - Reacts with powdered metals.
 - Reacts with alkali (lyes).
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Harmful if swallowed or if inhaled.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 Other adverse effects**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · 14.1 UN number or ID number · ADR, IMDG, IATA | UN1950 |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA | 1950 AEROSOLS
AEROSOLS
AEROSOLS, non-flammable |

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· 14.3 Transport hazard class(es)

· ADR



· Class 2.5A Gases.
· Label 2.2

· IMDG



-
· Class 2.2 Gases.
· Label 2.2

· IATA



· Class 2.2 Gases.
· Label 2.2

· 14.4 Packing group

-

· ADR, IMDG, IATA

Void

· 14.5 Environmental hazards:

· Marine pollutant:

No

· 14.6 Special precautions for user

Warning: Gases.

· Hazard identification number (Kemler code):

-

· EMS Number:

F-D,S-U

· Stowage Code

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre:

Category A. For AEROSOLS with a capacity above 1 litre:

Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

· Segregation Code

SG69 For AEROSOLS with a maximum capacity of 1 litre:

Segregation as for class 9. Stow "separated from" class 1 except for division 1.4.

For AEROSOLS with a capacity above 1 litre:

Segregation as for the appropriate subdivision of class 2.

For WASTE AEROSOLS:

Segregation as for the appropriate subdivision of class 2.

· 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

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· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E0

Not permitted as Excepted Quantity

· **Transport category**

3

· **Tunnel restriction code**

E

· **IMDG**· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E0

Not permitted as Excepted Quantity

· **UN "Model Regulation":**

UN 1950 AEROSOLS, 2.2

* **SECTION 15: Regulatory information**· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms GHS07**· **Signal word Warning**· **Hazard-determining components of labelling:**

trans-dichloroethylene

· **Hazard statements**

H229 Pressurised container: May burst if heated.

H302+H332 Harmful if swallowed or if inhaled.

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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

· **REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3**· **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.****SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H225 Highly flammable liquid and vapour.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

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H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** Technical Department

· **Contact:** Mr Clinton Palmer

· **Date of previous version:** 28.10.2022

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Aerosol 3: Aerosols – Category 3

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity – Category 4

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

EU