Prestan EKF

Version number: 7.0

2021-10-25

Issued: Replaces SDS: 2020-12-15



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

1.1. Product identifier

Trade name

Prestan EKF

UFI code

3M35-KU9K-8YOH-YUY6

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

Descaler for professional users.

Not suitable for use in

All other uses are discouraged.

1.3. Details of the supplier of the safety data sheet

Supplier

KLEEN PURGATIS GmbH

Street address

Dieselstraße 10

32120 Hiddenhausen

Germany

Telephone

+49 (0) 5223 9970-40

Email

info@kleen-purgatis.de

+49 (0) 5223 9970-195

Web site

www.kleenpurgatis.de

Contact person

Regulatory Affairs

Email address

info@kleen-purgatis.de

1.4. Emergency telephone number

+49 (0)551 - 19240 (GIZ-Nord)

Available outside office hours

Yes

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Skin corrosion, hazard category 1A Acute toxicity, inhalation, hazard category 4 Corrosive to metals, hazard category 1

Hazard statements

H290, H314, H332

Supplemental hazard statements

EUH071

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms





Signal word

Danger

Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

Supplemental hazard statements

EUH071 Corrosive to the respiratory tract.

Precautionary statements

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

P234 Keep only in original packaging.

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves/eye protection.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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/doctor.

More information

Hazard components for labeling:

Nitric acid

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



2.3. Other hazards

This mixture does not contain any substances that are classified as PBT or vPvB according to Article 57 / Annex XIII of the REACH regulation.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Nitric acid	7697-37-2 231-714-2 01-2119487297- 23-xxxx 007-004-00-1	10 - <26%	Ox. Liq. 2, Met. Corr. 1, Skin Corr. 1A	H272, H290, H314, EUH071 - ATE = 2.65 mg/L (Vapours)	Ox. Liq. 2; H272: C≥99 % Ox. Liq. 3; H272: 65 % ≤ C < 99 % Skin Corr. 1A; H314: C≥20 % Skin Corr. 1B; H314: 5 % ≤ C < 20 %; B

Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Description of first aid measures

First responders: Pay attention to self-protection.

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician immediately.

Skin contact

In case of contact, immediately flush skin with soap and plenty of water. Remove/Take off immediately all contaminated clothing. Call a physician immediately.

Eye contact

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

Ingestion

Do not induce vomiting. Drink water. Call physician immediately.

Information for doctors

Show this safety data sheet to the doctor in attendance.

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



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

Inhalation

shortness of breath / cough

Skin contact

Causes severe skin burns.

Eye contact

Causes eye burns. May cause irreversible eye damage.

Ingestion

If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

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

Treat symptomatically. For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product is not flammable. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray jet, carbon dioxide (CO2).

Unsuitable extinguishing media

Foam / sand / dry powder. Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self contained breathing apparatus. Use protective clothing.

Other

<u>Other</u>

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Ensure adequate ventilation, especially in confined areas. Evacuate unaffected personnel from the spill area.

6.2. Environmental precautions

Dam up. The product should not be allowed to enter drains, water courses or the soil.

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

For information on storage and handling see section 7.

For information on exposure and personal protective equipment, see Section 8.

For information on incompatible materials, see Section 10.

For information on disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Wear personal protective equipment. Avoid direct contact with the material / product. Ensure adequate ventilation, especially in confined areas.

General hygiene

When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from food, drink and animal feeding stuffs. Store in a place accessible by authorized persons only.

Storage class according to TRGS 510: 8B (non-flammable, corrosive hazardous substances)

Store in original container. Storage temperature: 10°C to 40°C

7.3. Specific end use(s)

PC36 - Water softeners See section 1.2: Descaler

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure limits

Ingredient	CAS No. EC No.	Exposure limit ppm / mg/m³	Short-term exposure limit ppm / mg/m³	Source	Remark	Year
Nitric acid (EU)	7697-37-2 231-714-2	-	1 2.6	2006/15/EG	_	-

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Eye / face protection

Chemical-resistant safety glasses with side protection (EN 166)

Hand protection

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The break through time depends amongst other things from the material, the thickness and the type of glove and therefore has to be measured for each case. The exact break through time can be obtained from the protective glove producer and this has to be observed.

Other skin protection

Long sleeved clothing

Respiratory protection

This type of personal protective equipment is not necessary under normal and foreseeable use of the product.

Thermal hazards

Not applicable

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

light yellow

Odour

stinging

Odour threshold

Not determined for the mixture.

Melting point / freezing point

Not determined for the mixture.

Boiling point or initial boiling point and boiling range

> 100 °C

Flammability

Not applicable.

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



Lower and upper explosion limit

Not applicable.

Flash point

No data available

Auto-ignition temperature

Not determined for the mixture.

Decomposition temperature

Not determined for the mixture.

<u>рН</u>

< 1

Kinematic viscosity

Not determined for the mixture.

Viscosity, dynamic

Not determined for the mixture.

Solubility

No data available

Water solubility

miscible

Partition coefficient n-octanol/water

Not determined for the mixture.

Vapour pressure

No data available

Density and/or relative density

1.156 g/cm³

Relative vapour density

Not determined for the mixture.

Evaporation Rate

Not determined for the mixture.

Explosive properties

The product / mixture has no explosive properties.

Oxidising properties

The product / mixture has no oxidizing properties.

Particle characteristics

This product / mixture does not contain any nanomaterials or nanoforms as defined in Regulation (EC) 1907/2006.

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



9.2. Other information

Conductivity: 16 mS/cm

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at normal conditions

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

10.5. Incompatible materials

Organic materials. Alkalis. Corrodes base metals.

10.6. Hazardous decomposition products

For information on combustion products, see Section 5.

By heating or fire toxic gas is liberated. Release of hydrogen (H₂).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicology data for the components

Acute toxicity

Corrosive to the respiratory tract

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Duration of exposure	Test animals	Remarks
Nitric acid 7697-37-2 / 231- 714-2	LC50	>2,65 mg/l	Inhalative	4h	rat	ECHA

Skin corrosion/irritation

Skin corrosion, hazard category 1A

Serious eye damage/irritation

Causes serious eye damage.

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



Germ cell mutagenicity

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

Mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties in terms of regulations (EC) 1907/2006 and (EU) 2018/605 and the delegated regulation (EU) 2017/2100.

SECTION 12: Ecological information

12.1. Toxicity

Acute crustacean toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species	Remark
Nitric acid 7697-37-2 / 231- 714-2	LC50	1,25 - 2,5 mg/l	48h	Ceriodaphnia dubia	ECHA

12.2. Persistence and degradability

Persistence and degradability

No information available

Decay/transformation

No information available

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

Mobility

No information available

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are classified as PBT or vPvB according to Article 57 / Annex XIII of the REACH regulation.

12.6. Endocrine disrupting properties

The mixture / product does not contain any ingredients with endocrine disrupting properties in terms of regulations (EC) 1907/2006 and (EU) 2018/605 and the delegated regulation (EU) 2017/2100.

12.7. Other adverse effects

Other adverse effects

This product / mixture does not contain any substances within the meaning of Regulation (EC) No. 1005/2009 that deplete the ozone layer.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Dispose of as hazardous waste in compliance with local and national regulations.

Packaging

Do not re-use empty containers. Empty containers should be taken for local recycling, recovery or waste disposal. Contaminated packaging: Dispose of as unused product.

Waste code	Description
06 01 05*	nitric acid and nitrous acid

Please note - an asterisk (*) next to a code denotes that it is HAZARDOUS WASTE.

SECTION 14: Transport information

14.1. UN number

2031

14.2. UN proper shipping name

nitric acid

IMDG proper shipping name

NITRIC ACID

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



14.3. Transport hazard class(es)

<u>Label</u>



ADR / RID Class

8

ADR / RID Classification code

C1

ADR / RID hazard identification number

80

IMDG Class

8

IATA Class

8

ADN Class

R

ADN Class Code

C1

14.4. Packing group

П

14.5. Environmental hazards

Environmental hazards

No

IMDG Marine Pollutant

No

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

Other

Additional information ADR-RID

LQ: 1 L EQ: E2

Transport category (tunnel restriction code): 2 (E)

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU regulations</u>

Regulation (EC) No. 648/2004 (detergents) Ingredients according to Annex VII: Exempt

Regulation (EC) No. 1272/2008 (CLP)

Regulation (EC) No. 1907/2006 (REACH)

Substances subject to authorization according to Annex XIV: No

Substance restrictions according to Annex XVII: No Substances on the REACH candidate list (SVHC): No

Regulation (EU) No. 528/2012 (BPR) Active ingredients: not applicable

Regulation (EU) 2019/1148 (explosives)

Restricted raw material according to Annex I: nitric acid (CAS: 7697-37-2)

Notifiable raw materials according to Annex II: not applicable

Directive 2011/65 / EU (ROHS 2)

Substance restrictions according to Annex II: not applicable

Regulation (EU) 2019/1021 (POP)

Persistent organic pollutants: not applicable

Directive 2012/18/EU (Seveso III)

Seveso hazard category: not applicable

National regulations

In addition, comply with all national and local regulations for the handling of chemicals.

Other regulations, limitations and legal regulations

Take note of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical safety assessment

The mixture has not been subjected to a safety assessment.

SECTION 16: Other information

Changes to previous revision

Adaptation to the amending regulation (EU) 2020/878

Prestan EKF

Version number: 7.0

Issued: 2021-10-25 **Replaces SDS:** 2020-12-15



Abbreviations

ADN - Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

ADR - Accord relatif au transport international des marchandises Dangereuses par Route

CAS - Chemical Abstract Service

CLP - Classification, Labelling and Packaging

DMEL - Derived Minimum Effect Level

DNEL - Derived no effect level

EC50 - Half maximal effective concentration 50%

GHS - Globally Harmonised System

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LC50 - Lethal concentration 50%

LD50 - Lethal dosis 50 %

MARPOL - International Convention for the Prevention of Pollution from Ships

PBT - Persistent, bioaccumulative and toxic substance

PEC - Predicted Environmental Concentration

PNEC - predicted no effect concentration

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals

RID - Reglement concernant le transport international ferroviaire de marchandises Dangereuses

SVHC - Substance of very high concern

vPvB - Very persistent, very bioaccumulative substance

References to key literature and data sources

REACH registration dossiers

ECHA C&L - Inventory

Safety data sheets from raw material suppliers

Evaluation methods for classification

Classification for mixtures and used evaluation method according to Article 9 of regulation (EC) 1272/2008 [CLP]:

Health hazards: calculation method

Environmental hazards: calculation method

Phrase meaning

Ox. Liq. 2 - Oxidising liquids, hazard category 2

Skin Corr. 1A - Skin corrosion, hazard category 1A

H272 May intensify fire; oxidiser.

H314 Causes severe skin burns and eye damage.

EUH071 Corrosive to the respiratory tract.

Other

Additional information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878.

Manufacturer's notes

Legal disclaimer: The above information is believed to be correct. This company shall not be held liable for any damage resulting from handling or from contact with the above product.