according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 1 of 10

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

1.1. Product identifier

5132 Professional Rim Cleaner G15132K5AB

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

Use of the substance/mixture

Cleaner

1.3. Details of the supplier of the safety data sheet

Company name: TUNAP GmbH & Co. KG
Street: Bürgermeister-Seidl-Str. 2
Place: D-82515 Wolfratshausen

Telephone: +49 (0) 8171/1600 - 0 Telefax: +49 (0) 8171/1600 - 40

e-mail: sdb@tunap.com Internet: www.tunap.com

1.4. Emergency telephone +49 (0) 30 30 686 790 (Giftnotruf Berlin)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Causes severe skin burns and eye damage.

May cause respiratory irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Salzsäure 31%

Isotridecanol, ethoxylated Ethoxylated Undecyl Alcohol

Signal word: Danger

Pictograms:





Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary statements

P260 Do not breathe vapours.

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

P262 Do not get in eyes, on skin, or on clothing.

P302+P352 IF ON SKIN: Wash with plenty of Water and soap..
P332+P313 If skin irritation occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 2 of 10

P337+P313 If eye irritation persists: Get medical advice/attention.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P314 Get medical advice/attention if you feel unwell.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | | | | |
|-------------|---|--------------|----------|--|--|--|--|
| | EC No | Index No | REACH No | | | | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | | | | |
| - | hydrochloric acid % | | | | | | |
| | 231-595-7 | 017-002-01-X | | | | | |
| | Skin Corr. 1B, STOT SE 3; H314 H335 | | | | | | |
| 69011-36-5 | Isotridecanol, ethoxylated | | | | | | |
| | 931-138-8 | | | | | | |
| | Acute Tox. 4, Eye Dam. 1; H302 H318 | | | | | | |
| 34590-94-8 | (2-methoxymethylethoxy)propanol | | | | | | |
| | 252-104-2 | | | | | | |
| | | | | | | | |
| 127036-24-2 | Ethoxylated Undecyl Alcohol | | | | | | |
| | | | | | | | |
| | Eye Dam. 1; H318 | | | | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

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

Headache, nausea, dizziness, fatigue, skin irritation

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

Treat symptomatically.

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 3 of 10

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Water fog. Foam. Carbon dioxide (CO2). Extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Remove all sources of ignition. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Ensure all waste water is collected and treated via a waste water treatment plant.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Further information on handling

Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Hints on joint storage

Do not store together with: Alkalis (alkalis). Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 4 of 10

Further information on storage conditions

Store in a cool dry place. Observe legal regulations and provisions.

7.3. Specific end use(s)

Cleaner

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m³ | fibres/ml | Category | Origin |
|------------|---|-----|-------|-----------|---------------|--------|
| 34590-94-8 | (2-methoxymethylethoxy) propanol | 50 | 308 | | TWA (8 h) | WEL |
| 7647-01-0 | Hydrogen chloride (gas and aerosol mists) | 1 | 2 | | TWA (8 h) | WEL |
| | | 5 | 8 | | STEL (15 min) | WEL |

Additional advice on limit values

a no restriction

b End of exposure or end of shift

c at long term exposure: after several previous shifts

d before next shift

blood (B)

Urine (U)

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

Eye/face protection

Suitable eye protection: Tightly sealed safety glasses.

DIN EN 166

Hand protection

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: NBR (Nitrile rubber) Breakthrough time (maximum wearing time) 480min

Thickness of the glove material 0,45 mm

DIN EN 374

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

When exceeding the relevant workplace exposure limits, note the following:

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)...

Filtering device with filter or ventilator filtering device of type: E

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

Environmental exposure controls

Observe legal regulations and provisions.

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 5 of 10

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: yellow
Odour: characteristic

Test method

pH-Value (at 20 °C): 1 (50 g/l) DIN 19268

Changes in the physical state

Melting point: not determined
Initial boiling point and boiling range: 100 °C

Flash point: > 110 °C ISO 3679

Flammability

Solid: not applicable
Gas: not applicable
Lower explosion limits: not determined
Upper explosion limits: not determined

Auto-ignition temperature

Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

Not oxidising.

Vapour pressure: not determined Vapour pressure: No information available.

Density (at 20 °C): 1,1 g/cm³ DIN 51757

Water solubility: completely miscible

Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic: DIN 53019-1

Viscosity / kinematic: DIN EN ISO 3104

(at 40 °C)

Flow time: DIN EN ISO 2431

(at 20 °C)

Vapour density: not determined Evaporation rate: not determined

9.2. Other information

Solid content: 5%

SECTION 10: Stability and reactivity

10.1. Reactivity

Possibility of hazardous reactions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 6 of 10

10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxides, Oxidising agent.

10.4. Conditions to avoid

Do not mix with alkali.

10.5. Incompatible materials

Oxidizing agents. Pyrophoric or self-heating substances.

10.6. Hazardous decomposition products

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO2, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

Further information

Do not mix with other chemicals.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

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

| CAS No | Chemical name | | | | | | | |
|------------|---------------------------------|-----------------|----------|---------|--------|--------|--|--|
| | Exposure route | Dose | | Species | Source | Method | | |
| 69011-36-5 | Isotridecanol, ethoxylated | | | | | | | |
| | oral | ATE 5 mg/kg | 500 | | | | | |
| 34590-94-8 | (2-methoxymethylethoxy)propanol | | | | | | | |
| | oral | LD50 5 mg/kg | 5135 | Rat | | | | |
| | dermal | LD50 1 mg/kg | 13000 | Rabbit | | | | |
| | inhalation vapour | LC50 5 | 500 mg/l | Rat | | | | |
| | inhalation gas | LC50 5 | 500 ppm | Rat | | | | |

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

No indications of human carcinogenicity exist.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

STOT-single exposure

May cause respiratory irritation. (hydrochloric acid ... %)

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.

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 7 of 10

Specific effects in experiment on an animal

No information available.

Additional information on tests

The mixture is classified as hazardous according to Directive 1999/45/EC.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity: The classification criteria for this hazard class are not met by definition.

| CAS No | Chemical name | | | | | | | |
|------------|-----------------------------------|--------------|----------|-----------|---------------------------------|--------|--------|--|
| | Aquatic toxicity | Dose | | [h] [d] | Species | Source | Method | |
| - | hydrochloric acid % | | | | | | | |
| | Acute fish toxicity | LC50 | 862 mg/l | 96 h | Leuciscus idus | | | |
| 34590-94-8 | 8 (2-methoxymethylethoxy)propanol | | | | | | | |
| | Acute fish toxicity | LC50 mg/l | 10000 | 96 h | Pimephales promelas | | | |
| | Acute algae toxicity | ErC50 | 969 mg/l | | Pseudokirchneriella subcapitata | | | |
| | Acute crustacea toxicity | EC50 mg/l | 1919 | 48 h | Daphnia magna | | | |

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

070101 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation,

supply and use (MFSU) of basic organic chemicals; aqueous washing liquids and mother liquors;

hazardous waste

Waste disposal number of used product

070101 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation,

supply and use (MFSU) of basic organic chemicals; aqueous washing liquids and mother liquors;

hazardous waste

Waste disposal number of contaminated packaging

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 8 of 10

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Salzsäure 31%)

14.3. Transport hazard class(es): П 14.4. Packing group: Hazard label: 8 Classification code: C1 **Special Provisions:** 274 Limited quantity: 1 L Excepted quantity: E2 Transport category: 2 Hazard No: 80 Tunnel restriction code: F

Inland waterways transport (ADN)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Salzsäure 31%)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Classification code:C1Special Provisions:274Limited quantity:1 LExcepted quantity:E2

Marine transport (IMDG)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (hydrochloric acid 31

%)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:274Limited quantity:1 LExcepted quantity:E2EmS:F-A. S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (hydrochloric acid 31

%)

14.3. Transport hazard class(es): 8
14.4. Packing group: |

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 9 of 10

Hazard label: 8

Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3 A803

0.5 L

Y840

Excepted quantity:

E2

IATA-packing instructions - Passenger: 851
IATA-max. quantity - Passenger: 1 L
IATA-packing instructions - Cargo: 855
IATA-max. quantity - Cargo: 30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: strongly corrosive.

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

EU regulatory information

2010/75/EU (VOC): No information available. 2004/42/EC (VOC): No information available.

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile

work protection guideline' (94/33/EC).

Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,14.

Abbreviations and acronyms

ADR: Accord européen sur le transport 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 Harmonized 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 LC50: Lethal concentration. 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

according to Regulation (EC) No 1907/2006

5132 Professional Rim Cleaner G15132K5AB

Revision date: 02.11.2017 Product code: 11AG15132K5AB Page 10 of 10

H318 Causes serious eye damage. H335 May cause respiratory irritation.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)