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

1.1. Product identifier

Trade name/designation:

Wheel Cleaner HD 51

Article No.:

T495005

UFI:

KFE1-ENV1-43MR-HM1H

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

Cleaning agent

Acid cleaner for truckwash, carwash and industrial tank cleaning, metal cleaning

Relevant identified uses:

Product Categories [PC]

PC 35: Washing and cleaning products

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH

Hartleitnerstraße 3 4653 Eberstalzell

Austria

Telephone: +43 (0) 7241 213 79

E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Corrosive to metals (Met. Corr. 1)	H290: May be corrosive to metals.	
Acute toxicity (oral) (Acute Tox. 4)	H302: Harmful if swallowed.	
Skin corrosion/irritation (Skin Corr. 1A)	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	
STOT-single exposure (STOT SE 3)	H335: May cause respiratory irritation.	

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms:





GHS05 Corrosion

GHS07 Exclamation mark

Signal word: Danger

Hazard components for labelling:

hydrogen chloride; ammonium hydrogendifluoride; Isotridecanol, ethoxylated (>5-20 EO); ammonium fluoride

Hazard statements	for physical hazards
H290	May be corrosive to metals.

Hazard statements for health hazards		
H302	Harmful if swallowed.	
H314	Causes severe skin burns and eye damage.	
H335	May cause respiratory irritation.	

Precautionary statements Prevention P280 Wear protective gloves/protective clothing and eye protection/face protection.

Precautionary statements Response		
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.	
	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].	
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
	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.	
P321	Specific treatment (see on this label).	

Precautionary stat	ements Storage
P405	Store locked up.

Precautionary statements Disposal		
P501	Dispose of contents/container to an appropriate recycling or disposal facility.	

2.3. Other hazards

Other adverse effects:

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description:

Cleaning agent

Additional information:

Nonionic surfactants, Dye < 5%

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Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 7647-01-0 EC No.: 231-595-7	hydrogen chloride Eye Dam. 1 (H318), Met. Corr. 1 (H290), STOT SE 3 (H335), Skin Corr. 1A (H314) Other Danger	10 - 25 Vol-%
CAS No.: 1341-49-7 EC No.: 215-676-4	ammonium hydrogendifluoride Acute Tox. 3 (H301), Skin Corr. 1B (H314) Danger	2.5 - 10 Vol-%
CAS No.: 69011-36-5 EC No.: 500-241-6 REACH No.: 01-2119976362-32	Isotridecanol, ethoxylated (>5-20 EO) Acute Tox. 4 (H302), Eye Dam. 1 (H318)	2.5 - 10 Vol-%
CAS No.: 12125-01-8 EC No.: 235-185-9	ammonium fluoride Acute Tox. 3 (H301, H311, H331) Danger	< 2 Vol-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Remove person to fresh air and keep comfortable for breathing.

Immediately remove any contaminated clothing, shoes or stockings.

Symptoms of poisoning may not appear for many hours, therefore medical monitoring for at least 48 hours after an accident.

Following inhalation:

If unconscious, position and transport in stable lateral position.

In case of skin contact:

Wash with plenty of water and soap.

After eye contact:

Rinse opened eye for several minutes under running water. Consult a doctor if symptoms persist

Following ingestion:

Call a physician immediately. Drink plenty of water. Provide fresh air.

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

Dyspnoea, Headache, Dizziness, Cough

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 media:

Water

5.2. Special hazards arising from the substance or mixture

Formation of toxic gases when heated or in case of fire.

5.3. Advice for firefighters

Special protective equipment for firefighters: Wear respiratory protection.

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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

Personal precautions:

Special danger of slipping by leaking/spilling product. Provide adequate ventilation. Wear respiratory protection. Wear protective equipment. Keep unprotected persons away.

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of spillage into water or sewage system, inform the competent authorities.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Apply neutralizing agent.

Other information:

Provide adequate ventilation. Dispose of contaminated material as waste according to section 13.

6.4. Reference to other sections

Further information on proper storage: see section 7.

For further information on personal protective equipment: see section 8.

For further information on disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

When diluting/dissolving, always have the water ready first, then slowly stir in the product.

Ensure good ventilation/extraction at the workplace.

Avoid aerosol formation.

Fire prevent measures:

The product is not flammable.

Have breathing apparatus ready.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Keep/Store only in original container.

Hints on storage assembly:

Do not store together with: alkalines

Further information on storage conditions:

Keep locked up. Store in a well-ventilated place. Keep container tightly closed. Protect from frost.

7.3. Specific end use(s)

Recommendation:

No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	 Long-term occupational exposure limit value Short-term occupational exposure limit value Instantaneous value Monitoring and observation processes Remark
MAK (AT)	hydrogen chloride CAS No.: 7647-01-0 EC No.: 231-595-7	② 10 ppm (15 mg/m³) ⑤ (Chlorwasserstoff; max. 8x5 min./Schicht, Momentanwert)
MAK (AT)	hydrogen chloride CAS No.: 7647-01-0 EC No.: 231-595-7	① 5 ppm (8 mg/m³) ⑤ (Chlorwasserstoff)
IOELV (EU)	hydrogen chloride CAS No.: 7647-01-0 EC No.: 231-595-7	① 5 ppm (8 mg/m³) ② 10 ppm (15 mg/m³) ⑤ (Hydrogen chloride)
MAK (AT)	ammonium hydrogendifluoride CAS No.: 1341-49-7 EC No.: 215-676-4	① 2.5 mg/m³ ⑤ (Fluoride, berechnet als F; einatembare Fraktion)
MAK (AT) from 2 Sept 2020	ammonium hydrogendifluoride CAS No.: 1341-49-7 EC No.: 215-676-4	② 12.5 mg/m³ ⑤ (max. 2x30 min./Schicht, einatembare Fraktion)
IOELV (EU)	ammonium hydrogendifluoride CAS No.: 1341-49-7 EC No.: 215-676-4	① 2.5 mg/m³ ⑤ (Fluorides, inorganic)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No further details. See section 7.

8.2.2. Personal protection equipment





Eye/face protection:

Safety goggles with side shields (EN 166).

Skin protection:

Hand protection:

Wear protective gloves.

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

Selection of the glove material considering the breakthrough times, permeation rates and degradation.

Glove material: NBR (Nitrile rubber)

Recommended material thickness: ≥ 0,5 mm

Permeation time (maximum wear duration): 240 min.

The selection of a suitable glove depends not only on the material but also on other quality features and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use.

Respiratory protection:

Respiratory protection is not required if the room is well ventilated.

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Respiratory protection is only necessary when spraying without adequate exhaust ventilation, in case of aerosol or mist formation, at high concentrations.

In case of short-term or low exposure use respiratory filter device; in case of intensive or prolonged exposure use self-contained breathing apparatus.

Other protection measures:

General protective and hygienic measures: Keep away from food, drink and animal feed. Immediately remove any contaminated clothing, shoes or stockings. Wash hands before breaks and after work. Avoid contact with eyes and skin.

8.2.3. Environmental exposure controls

Use a suitable container to prevent environmental pollution.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid Colour: colourless

Odour: characteristic Odour threshold: not determined

Safety relevant basis data

Parameter	Value	at °C	① Method
			② Remark
рН	1	20 °C	
Melting point	No data available		
Freezing point	No data available		
Initial boiling point and boiling range	85 °C		
Flash point	> 65 °C		
Evaporation rate	No data available		
Auto-ignition temperature	No data available		
Upper/lower flammability or explosive limits	No data available		
Vapour pressure	23 hPa	20 °C	
Vapour density	No data available		
Density	1.09 g/cm ³	20 °C	
Bulk density	not applicable		
Water solubility	completely miscible		
Dynamic viscosity	No data available		
Kinematic viscosity	No data available		

9.2. Other information

The product is not self-igniting. The product is not explosive.

9.2.1. Information with regard to physical hazard classes

Explosives:

Not applicable

Flammable gases:

Not applicable

Aerosols:

Not applicable

Oxidizing gases:

Not applicable

Gases under pressure:

Not applicable

Flammable liquids:

Not applicable

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Flammable solids:

Not applicable

Self-reactive substances and mixtures:

Not applicable

Pyrophoric liquids:

Not applicable

Pyrophoric solids:

Not applicable

Self-heating substances and mixtures:

Not applicable

Substances or mixtures which, in contact with water, emit flammable gases:

Not applicable

Oxidizing liquids:

Not applicable

Oxidizing solids:

Not applicable

Organic peroxides:

Not applicable

Corrosive to metals:

Not applicable

Desensitised explosives:

Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No further relevant information available.

10.2. Chemical stability

Thermal decomposition / Conditions to avoid: No decomposition when used as directed.

10.3. Possibility of hazardous reactions

Corrosive to metals.

When diluting/dissolving, always have the water ready first, then slowly stir in the product.

10.4. Conditions to avoid

Do not use as a spray or mist if there is no fresh air or ventilation. For example, in a tank or silo or in other enclosed spaces.

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

hydrogen chloride CAS No.: 7647-01-0 EC No.: 231-595-7

LD₅₀ oral: >700 mg/kg (Rat)

LD₅₀ dermal: >5,000 mg/kg (Rabbit)

LC₅₀ Acute inhalation toxicity (dust/mist): 1.68 mg/L 1 h (Rat)

ammonium hydrogendifluoride CAS No.: 1341-49-7 EC No.: 215-676-4

LD₅₀ oral: 130 mg/kg (Rat)

Isotridecanol, ethoxylated (>5-20 EO) CAS No.: 69011-36-5 EC No.: 500-241-6

LD₅₀ oral: 300 - 2,000 mg/kg (Rat) LD₅₀ dermal: >2,000 mg/kg (Rabbit)

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Acute oral toxicity:

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

Acute dermal toxicity:

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

Acute inhalation toxicity:

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

Skin corrosion/irritation:

Causes severe skin burns and eye damage.

Serious eye damage/irritation:

Causes serious eye damage.

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.

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:

May cause respiratory irritation.

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:

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

SECTION 12: Ecological information

12.1. Toxicity

hydrogen chloride CAS No.: 7647-01-0 EC No.: 231-595-7

LC₅₀: 282 mg/L 4 d (fish)

ammonium hydrogendifluoride CAS No.: 1341-49-7 EC No.: 215-676-4

LC₅₀: 51 mg/L 4 d (fish, Salmo gairdneri)

EC₅₀: 43 mg/L 4 d (Algae/water plant, Scenedesmus subspicatus)

Isotridecanol, ethoxylated (>5-20 EO) CAS No.: 69011-36-5 EC No.: 500-241-6

LC₅₀: 1 - 10 mg/L 4 d (fish)

EC₅₀: 1 - 10 mg/L 2 d (crustaceans)

EC₅₀: 1 - 10 mg/L 3 d (Algae/water plant, Scenedesmus subspicatus)

Aquatic toxicity:

No further relevant information available.

Assessment/classification:

No further relevant information available.

12.2. Persistence and degradability

Additional information:

No further relevant information available.

12.3. Bioaccumulative potential

Accumulation / Evaluation:

No further relevant information available.

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12.4. Mobility in soil

No further relevant information available.

12.5. Results of PBT and vPvB assessment

hydrogen chloride CAS No.: 7647-01-0 EC No.: 231-595-7

Results of PBT and vPvB assessment: —

ammonium hydrogendifluoride CAS No.: 1341-49-7 EC No.: 215-676-4

Results of PBT and vPvB assessment: —

Isotridecanol, ethoxylated (>5-20 EO) CAS No.: 69011-36-5 EC No.: 500-241-6

Results of PBT and vPvB assessment: —

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Drinking water hazard even when small quantities leak into the subsoil.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. into the sewerage system. Flushing away larger quantities into sewers or water bodies can lead to an increase in pH value. A high pH-value damages water organisms. In the dilution of the application concentration, the value is reduced considerably, so that after use of the product the waste water entering the sewage system is only slightly hazardous to water. are only slightly hazardous to water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Must not be disposed of together with household waste. Do not allow to enter into surface water or drains.

Waste treatment options

Appropriate disposal / Package:

Uncleaned packaging: Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RI	D) Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number o	or ID number		
UN 3264	UN 3264	UN 3264	UN 3264
14.2. UN proper sh	nipping name		
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ammonium hydrogendifluoride, sulphuric acid)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (ammonium hydrogendifluoride, sulphuric acid)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (AMMONIUM HYDROGENDIFLUORIDE, SULPHURIC ACID)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (AMMONIUM HYDROGENDIFLUORIDE, SULPHURIC ACID)
14.3. Transport ha	zard class(es)		
8	8	8	8
14.4. Packing grou	ID .	1 5	
 		lii	lu .
14.5. Environment	al hazards	l .	
No	No	No	No
14.6. Special preca	autions for user	•	
Special Provisions: 274	Special Provisions: 274	Special Provisions: 274	Special Provisions: A3

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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
Limited quantity (LQ):	Limited quantity (LQ):	Limited quantity (LQ):	Limited quantity (LQ): Y840
Excepted Quantities (EQ):	Excepted Quantities (EQ): E2	Excepted Quantities (EQ): E2	Excepted Quantities (EQ): E2
Hazard identification number (Kemler No.):	Classification code:	EmS-No.: F-A, S-B	
Classification code: C1 Tunnel restriction code: (E)		Remark: Maximum net quantity per inner packaging: 30ml Maximum net quantity per outer packaging: 500ml	

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Authorisations:

Directive 2012/18/EU

Named dangerous substances - ANNEX I: hydrochloric acid

Restrictions on use:

Regulation (EC) No 1907/2006 ANNEX XVII: Restriction conditions: 3, 65

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

ACGIH	American Conference of	f Governmental	Industrial Hygienists

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland

Waterways

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

BCF Bioconcentration Factor CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging

DNEL derived no-effect level

EC₅₀ Effective Concentration 50%

EN European Standard ES Exposure scenario

EWC European Waste Catalogue

ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization

KG body weight

LC₅₀ Lethal (fatal) Concentration 50%

LD₅₀ Lethal (fatal) Dose 50%

MAK Maximum concentration in the workplace air (CH)

NFPA National Fire Protection Association

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NIOSH National Institute for Occupational Safety & Health

NOEC No Observed Effect Concentration

OECD Organisation for Economic Cooperation and Development

OSHA Occupational Safety & Health Administration PBT persistent and bioaccumulative and toxic

PC Product category

PNEC Predicted No Effect Concentration

QSAR Quantitative Structure-Activity Relationship

REACH Registration, Evaluation and Authorization of Chemicals RID Dangerous goods regulations for transport by rail

SCL Specific concentration limit

TRGS Technische Regeln für Gefahrstoffe

UN United Nations

VOC Volatile organic compounds ZNS central nervous system

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Corrosive to metals (Met. Corr. 1)	H290: May be corrosive to metals.	
Acute toxicity (oral) (Acute Tox. 4)	H302: Harmful if swallowed.	
Skin corrosion/irritation (Skin Corr. 1A)	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	
STOT-single exposure (STOT SE 3)	H335: May cause respiratory irritation.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.

16.6. Training advice

No data available

16.7. Additional information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.