SAFETY DATA SHEET of:

Penetrating Rust Remover Spray

Revision date: Friday, June 1, 2018

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

1.1 Product identifier:

Penetrating Rust Remover Spray

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

aerosols

Concentration in use: /

1.3 Details of the supplier of the safety data sheet:

WINKEL GmbH

Lisztstraße 1

53881 Euskirchen - Germany

Tel.: +49 2251 77 69 400-401

Fax: +49 2251 77 69 402

E-Mail: info@winkelgroup.de

Internet: www.winkelgroup.de

1.4 Emergency telephone number:

BfR Bundesinstitut für Risikobewertung: +49-30-18412-0

Ontario Poison Centre: +1 (800)-268-9017

Alberta Poison & Drug Information Service: +1 (800) 332-1414 American Association of Poison Control Centers: +1 (800) 222-1222

The Centre antipoison du Québec: +1 (800) 463-5060

2 SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008:

H222 Flam. Aerosol 1 H229

2.2 Label elements:

Pictograms:



Signal word:

Danger

Hazard statements:

H222 Flam. Aerosol 1: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P211: Do not spray on an open flame or other ignition source.

P251: Do not pierce or burn, even after use.

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

Contains:

None

2.3 Other hazards:

None

3 SECTION 3: Composition/information on ingredients:

n-Butane (<0,01% Butadiene -1,3)	≤ 40 %	CAS number: EINECS: REACH Registration number: CLP Classification:	106-97-8 203-448-7 Annex V H220 Flam. Gas 1
Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, <2% aromatics	≤ 30 %	CAS number: EINECS: REACH Registration number: CLP Classification:	1174522-09-8 918-481-9 01-2119457273-39 EUH066 H304 Asp. Tox. 1
Propane	≤ 30 %	CAS number: EINECS: REACH Registration number: CLP Classification:	74-98-6 200-827-9 Annex V H220 Flam. Gas 1
Mineral Oil	≤ 20 %	CAS number: EINECS: REACH Registration number: CLP Classification:	8042-47-5 232-455-8 01-2119487078-27 H304 Asp. Tox. 1

For the full text of the H phrases mentioned in this section, see section 16.

4 SECTION 4: First aid measures:

4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

Skin contact: Remove contaminated clothing, rinse skin with plenty of water, if necessary seek

medical attention.

Eye contact: Thoroughly rinse with water (contact lenses to be removed if this is easily done) then

take to physician.

Ingestion: Rinse mouth, do not induce vomiting, take to hospital immediately.

Inhalation: Let sit upright, fresh air, rest and take to hospital.

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

Skin contact: None
Eye contact: Redness

Ingestion: Diarrhoea, headache, abdominal cramps, sleepiness, vomiting

Inhalation: None

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

None

5 SECTION 5: Fire-fighting measures:

5.1 Extinguishing media:

CO2, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

None

5.3 Advice for firefighters:

Extinguishing agents to be

avoided:

None

6 SECTION 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

6.2 Environmental precautions:

Do not allow to flow into sewers or open water.

6.3 Methods and material for containment and cleaning up:

Contain released substance, store into suitable containers. If possible, remove by using absorbent material.

6.4 Reference to other sections:

For further information, check sections 8 & 13.

7 SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Handle with care to avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in a sealed container in a closed, frost-free, ventilated room.

7.3 Specific end use(s):

aerosols

8 SECTION 8: Exposure controls/personal protection:

8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the TLV value is known

n-Butane (<0,01% Butadiene -1,3) 2,370 mg/m³, Propane 1,800 mg/m³

8.2 Exposure controls:

Inhalation protection:	Respiratory protection is not required. Use ABEK type gas masks in case of irritating exposure. If necessary, use with sufficient exhaust ventilation.	
Skin protection:	Handling with nitril-gloves (EN 374). Breakthrough time: >480' Material thickness: 0,35 mm. Thoroughly check gloves before use. Take of the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
Eye protection:	Keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	
Other protection:	Wear impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	

9 SECTION 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

Melting point/melting range:

Boiling point/Boiling range: -140 °C — 211 °C

pH: /
pH 1% diluted in water: /

Vapour pressure/20°C,:853 000 PaVapour density:Not applicableRelative density, 20°C:0.7750 kg/lAppearance/20°C:Liquid

Flash point: 61 °C

Flammability (solid, gas): Not applicable

Auto-ignition temperature: $255 \, ^{\circ}\text{C}$ Upper flammability or explosive $9.500 \, \%$

limit, (Vol %):

Lower flammability or explosive

limit, (Vol %):

0.700 %

Explosive properties: Not applicable
Oxidising properties: Not applicable

Decomposition temperature:

Solubility in water: Not soluble

Partition coefficient: n- Not applicable

octanol/water:

Odour: characteristic
Odour threshold: Not applicable
Dynamic viscosity, 20°C: 1 mPa.s
Kinematic viscosity, 40°C: 1 mm²/s
Evaporation rate (n-BuAc = 1): 0.040

9.2 Other information:

Volatile organic component (VOC): 84.00 % Volatile organic component (VOC): 532.862 g/l

Sustained combustion test: /

10 SECTION 10: Stability and reactivity:

10.1 Reactivity:

Stable under normal conditions.

10.2 Chemical stability:

Extremely high or low temperatures.

10.3 Possibility of hazardous reactions:

None

10.4 Conditions to avoid:

Protect from sunlight and do not expose to temperatures exceeding + 50°C.

10.5 Incompatible materials:

Keep away from sources of ignition

10.6 Hazardous decomposition products:

Under recommended usage conditions, hazardous decomposition products are not expected.

11 SECTION 11: Toxicological information:

11.1 Information on toxicological effects:

About the preparation itself: No additional data available

Calculated acute toxicity, ATE oral: / Calculated acute toxicity, ATE /

dermal:

n-Butane (<0,01% Butadiene -1,3)

LD50 oral, rat: ≥ 5 000 mg/kg

LD50 dermal, rabbit: ≥ 5 000 mg/kg

LC50, Inhalation, rat, 4h: ≥ 50 mg/l

Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclic, <2% aromatics	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	≥ 5 000 mg/kg ≥ 5 000 mg/kg ≥ 50 mg/l
Propane	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	≥ 5 000 mg/kg ≥ 5 000 mg/kg ≥ 50 mg/l
Mineral Oil	LD50 oral, rat: LD50 dermal, rabbit: LC50, Inhalation, rat, 4h:	≥ 5 000 mg/kg ≥ 5 000 mg/kg ≥ 50 mg/l

12 SECTION 12: Ecological information:

12.1 Toxicity:

No additional data available

12.2 Persistence and degradability:

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3 Bioaccumulative potential:

	Additional data:
n-Butane (<0,01% Butadiene -1,3)	log Pow: 2,890

12.4 Mobility in soil:

Water hazard class, WGK (AwSV): 1

Solubility in water: Not soluble

12.5 Results of PBT and vPvB assessment:

No additional data available

12.6 Other adverse effects:

No additional data available

13 SECTION 13: Disposal considerations:

13.1 Waste treatment methods:

Draining into the sewers is not permitted. Removal should be carried out by licensed services. Possible restrictive regulations by local authority should always be adhered to.

14 SECTION 14: Transport information:

14.1 UN number:

1950

14.2 UN proper shipping name:

UN 1950 Aerosols, flammable, 5F, (D)

14.3 Transport hazard class(es):

Class(es): 5F

Identification number of the N

hazard:

Not applicable

14.4 Packing group:

Not applicable

14.5 Environmental hazards:

Not dangerous to the environment

14.6 Special precautions for user:

Hazard characteristics: Risk of fire. Risk of explosion. Containments may explode when heated.

Additional guidance: Take cover. Keep out of low areas.



15 SECTION 15: Regulatory information:

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

Water hazard class, WGK (AwSV): 1

Volatile organic component (VOC): 84.000 % Volatile organic component (VOC): 532.862 g/l

Composition by regulation (EC)

Aliphatic hydrocarbons > 30%, Anionic surfactants < 5%

15.2 Chemical Safety Assessment:

No data available

648/2004:

16 SECTION 16: Other information:

Legend to abbreviations used in the safety data sheet:

ADR: The European Agreement concerning the International Carriage of Dangerous

Goods by Road

ATE: Acute Toxicity Estimate

BCF: Bioconcentration factor

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of chemicals

EINECS: European INventory of Existing commercial Chemical Substances

LC50: median Lethal Concentration for 50% of subjects

LD50: median Lethal Dose for 50% of subjects

Nr.: Number

PTB: Persistent, Toxic, Bioaccumulative

TLV: Threshold Limit Value

vPvB: very Persistent and very Bioaccumulative substances

WGK: Water hazard class

WGK 1: Slightly hazardous for water

WGK 2: Hazardous for water

WGK 3: Extremely hazardous for water

Legend to the H Phrases used in the safety data sheet:

EUH066: Repeated exposure may cause skin dryness or cracking. H220 Flam. Gas 1: Extremely flammable gas. H222 Flam. Aerosol 1: Extremely flammable aerosol. H229: Pressurised container: May burst if heated. H304 Asp. Tox. 1: May be fatal if swallowed and enters airways.

CLP Calculation method:

Calculation method

Reason of revision, changes of following items:

Section: 9.2

SDS reference number:

ECM-107121,00

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2015/830. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.