

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

1.1 Product identifier

Trade name: **BREMSENREINIGER - 5 Ltr.**

Article number: 4000 354106

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

Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Application of the substance / the preparation: Cleaning material/ Detergent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Nordwest Handel AG

Berliner Str. 26 - 36

D-58135 Hagen

Phone: +49 (0)2331/4610

Fax: +49 (0)2331/461389

Further information obtainable from: Datenblatt ausstellender Bereich/fachkundige Person: sdb@nordwest.com

1.4 Emergency telephone number:

Deutschland:

Giftinformationszentrum (GIZ), Mainz - Tel. +49(0)6131/19240 (24 h von Mo. – So.)

Österreich:

Vergiftungsinformationszentrale der Gesundheit Österreich Tel. +43 1 406 43 43

Schweiz:

Tox Info Suisse Tel. 145, 24h oder +41 44 251 51 51

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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



GHS02



GHS07



GHS08



GHS09

Signal word Danger

Hazard-determining components of labelling:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic 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.

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

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves / eye protection.

P240 Ground/bond container and receiving equipment.

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- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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.
 P321 Specific treatment (see on this label).
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

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

Dangerous components:

EC number: 921-024-6 Reg.nr.: 01-2119475514-35-0000	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	60-100%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	≤10%
CAS: 110-82-7 EINECS: 203-806-2 Index number: 601-017-00-1 Reg.nr.: 01-2119463273-41-xxxx	cyclohexane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	5-<10%
CAS: 110-54-3 EINECS: 203-777-6 Index number: 601-037-00-0	n-hexane ⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	1-<3%
Regulation (EC) No 648/2004 on detergents / Labelling for contents		
aliphatic hydrocarbons		≥ 30%

SECTION 4: First aid measures

4.1 Description of first aid measures

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **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:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

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:

- Do not allow product to reach sewage system or any water course.
- 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:

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to item 13.

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Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

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.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:** Store in a cool location.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****67-63-0 propan-2-ol**AGW (Germany) Long-term value: 500 mg/m³, 200 ppm
2(II);DFG, Y**110-82-7 cyclohexane**AGW (Germany) Long-term value: 700 mg/m³, 200 ppm
4(II);DFG, EU**110-54-3 n-hexane**AGW (Germany) Long-term value: 180 mg/m³, 50 ppm
8(II);DFG, EU, Y**DNELs****Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane**

Oral DNEL 699 mg/kg/bw/day (population)

Dermal DNEL 699 mg/kg bw/day (population)

773 mg/kg bw/day (worker)

Inhalative DNEL 608 mg/m³ (population)2035 mg/m³ (worker)**Ingredients with biological limit values:****67-63-0 propan-2-ol**

BGW (Germany) 25 mg/l

Untersuchungsmaterial: Vollblut

Probennahmezeitpunkt: Expositionsende bzw. Schichtende

Parameter: Aceton

25 mg/l

Untersuchungsmaterial: Urin

Probennahmezeitpunkt: Expositionsende bzw. Schichtende

Parameter: Aceton

110-82-7 cyclohexane

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BGW (Germany)	150 mg/g Kreatinin Untersuchungsmaterial: Urin Probennahmezeitpunkt: bei Langzeitexposition: Nach mehreren vorangegangenen Schichten, Expositionsende bzw. Schichtende Parameter: 1,2-Cyclohexandiol (nach Hydrolyse)
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110-54-3 n-hexane

BGW (Germany)	5 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: 2,5-Hexandion plus 4,5-Dihydroxy-2-hexanon (nach Hydrolyse)
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· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Filter A

· **Protection of hands:**



Protective gloves

· **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.

· **As protection from splashes gloves made of the following materials are suitable:** PVC or PE gloves

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Light weight protective clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 80 °C

· **Flash point:** < 0 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 260 °C

· **Decomposition temperature:** Not determined.

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· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1,0 Vol %
Upper:	12,0 Vol %
· Vapour pressure at 20 °C:	43 hPa
· Density at 20 °C:	0,741 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **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 toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Dermal	LD50	> 2920 mg/kg (rat) (OECD 402)
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67-63-0 propan-2-ol

Oral	LD50	4570 mg/kg (rat)
Dermal	LD50	13400 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

110-82-7 cyclohexane

Oral	LD50	> 5000 mg/kg (rat) (OECD 401)
Dermal	LD50	> 2000 mg/kg (rabbit) (OECD 403)
Inhalative	LC50/4 h	32,88 mg/l (rat) (OECD 402)
	LOAEL / 4h	> 20 mg/l (rat) (OECD 403)
		Zielorgan: Nervensystem
	NOAEL / 90d	> 250 ppm (rat)

110-54-3 n-hexane

Oral	LD50	5000 mg/kg (mouse)
Dermal	LD50	> 2000 mg/kg (rabbit)
Inhalative	LC50/4 h	172 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitisation:** No sensitising effects known.

· **Experience with humans:**

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Oral	LD50	> 5840 g/kg (rat) (OECD 401)
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· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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Irritant

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

EL50/48h	3 mg/l (daphnia magna) (OECD 202)
EL50/72h	30 mg/l (Algen) (OECD 210)
LL50/96h	11,4 mg/l (fish) (OECD 203)

110-82-7 cyclohexane

EC50 / 48h	2,4 mg/l (daphnia magna) (OECD 202)
EC50 / 72h	9,317 mg/l (Algen) (OECD 201)
LC50 / 96 h	4,53 mg/l (fish) (OECD 203)
NOEC / 72h	0,94 mg/l (Algen) (OECD 201)

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.

Ecotoxicological effects:

Remark: Toxic for fish

Additional ecological information:

General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

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.

European waste catalogue

The waste codes are recommendations based on the possible use of this product. Because of the special use and disposal conditions at the user might,

14 06 03*	other solvents and solvent mixtures
15 01 02	plastic packaging

Uncleaned packaging:

Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA

UN1993

14.2 UN proper shipping name

ADR

1993 FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, ISOPROPANOL (ISOPROPYL ALCOHOL)), ENVIRONMENTALLY HAZARDOUS

IMDG

FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, ISOPROPANOL (ISOPROPYL ALCOHOL)), MARINE POLLUTANT

IATA

FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, ISOPROPANOL (ISOPROPYL ALCOHOL))

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14.3 Transport hazard class(es)

ADR



· Class 3 (F1) Flammable liquids.
· Label 3

IMDG



· Class 3 Flammable liquids.
· Label 3

IATA



· Class 3 Flammable liquids.
· Label 3

14.4 Packing group

· ADR, IMDG, IATA II

14.5 Environmental hazards:

Product contains environmentally hazardous substances: Naphtha (petroleum), hydrotreated light
· Marine pollutant: Yes
Symbol (fish and tree)
· Special marking (ADR): Symbol (fish and tree)

14.6 Special precautions for user

Warning: Flammable liquids.
· Danger code (Kemler): 33
· EMS Number: F-E,S-E

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

Transport/Additional information:

ADR

· Limited quantities (LQ) 1L
· Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml
· Transport category 2
· Tunnel restriction code D/E

IMDG

· Limited quantities (LQ) 1L
· Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation":

UN1993, FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

No further relevant information available.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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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.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H361f Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

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 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)
- DNEL: Derived No-Effect Level (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Flam. Liq. 2: Flammable liquids, Hazard Category 2
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Repr. 2: Reproductive toxicity, Hazard Category 2
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
- Asp. Tox. 1: Aspiration hazard, Hazard Category 1
- Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
- Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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

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