



according to Regulation (EC) No 1907/2006

NORD-TEST Reiniger U 87 Spray

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

1.1. Product identifier

NORD-TEST Reiniger U 87 Spray

Further trade names

121.300.101

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

Use of the substance/mixture

Washing and cleaning products (including solvent based products)

1.3. Details of the supplier of the safety data sheet

Company name: Helling GmbH
Street: Spoekerdamm 2
Place: D-25436 Heidgraben

Telephone: +49-4122-922-0 Telefax:+49-4122-922-201

e-mail: info@helling.de Internet: www.helling.de

<u>1.4. Emergency telephone</u> GIZ Nord Göttingen +49-(0)551-19240 (Information in German and English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Aerosol: Aerosol 1

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes serious eye irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Danger

Pictograms:





Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H319 Causes serious eye irritation.

Precautionary statements

P102 Keep out of reach of children.

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.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.

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



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

present and easy to do. Continue rinsing.

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

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 accordin	g to Regulation (EC) No. 1272/2008	[CLP]			
64-17-5	ethanol, ethyl alcohol			75 - 85 %		
	200-578-6	603-002-00-5	01-2119457610-43			
	Flam. Liq. 2, Eye Irrit. 2; H225 H319					
106-97-8	butane	10 - 16 %				
	203-448-7	601-004-00-0	01-2119474691-32			
	Flam. Gas 1; H220					
74-98-6	propane			4 - 8 %		
	200-827-9	601-003-00-5	01-2119486944-21			
	Flam. Gas 1; H220					

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!

After inhalation

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If victim is at risk of losing consciousness, position and transport on their side.

After contact with skin

Wash with plenty of water. Change contaminated clothing.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

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

Following inhalation: Headache. drowsiness. Dizziness. unconsciousness.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Foam. Extinguishing powder. Atomized water.



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Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Vapours may form explosive mixtures with air.

Heating causes rise in pressure with risk of bursting.

In case of fire may be liberated: Carbon monoxide Carbon dioxide.

5.3. Advice for firefighters

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. Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

Provide adequate ventilation. Remove all sources of ignition.

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

Remove persons to safety.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion hazard. Suppress gases/vapours/mists with water spray jet.

6.3. Methods and material for containment and cleaning up

Ventilate affected area.

Flammable liquids: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours may form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place.

Keep away from sources of ignition - No smoking. Protect against direct sunlight. Heating causes rise in pressure with risk of bursting.

Hints on joint storage

Do not store together with: Oxidizing agents.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection



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8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance					
DNEL type		Exposure route	Effect	Value		
64-17-5	ethanol, ethyl alcohol					
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day		
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day		
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day		
Consumer DNEL, acute		inhalation	local	950 mg/m³		
Consumer DNEL, long-term		inhalation	systemic	114 mg/m³		
Worker DNEL, acute		inhalation	local	1900 mg/m³		
Worker DNEL, long-term		inhalation	systemic	950 mg/m³		

PNEC values

CAS No	Substance			
Environmenta	al compartment	Value		
64-17-5	ethanol, ethyl alcohol			
Freshwater 0,96 m		0,96 mg/l		
Marine water		0,79 mg/l		
Freshwater sediment		3,6 mg/kg		
Marine sediment		2,9 mg/kg		
Micro-organisms in sewage treatment plants (STP)		580 mg/l		
Soil 0,63 mg/		0,63 mg/kg		

Additional advice on limit values

DNEL/DMEL and PNEC values: No data available

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

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink. Keep away from food, drink and animal feedingstuffs. Do not breathe gas/vapour/aerosol. Avoid contact with eyes and skin.

Eye/face protection

Wear eye/face protection.





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Hand protection

Tested protective gloves are to be worn: Solvent-proof.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Before using check leak tightness / impermeability.

Recommended protective gloves brand:

NBR (Nitrile rubber). Butyl rubber. FKM (fluororubber).

penetration time (maximum wearing period): > 8 h (DIN EN 374) Protective gloves have to be replaced at the first sign of deterioration.

Skin protection

Body protection: not required.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Aerosol
Colour: colourless
Odour: Alcohol

pH-Value: neutral

Changes in the physical state

Melting point:
Initial boiling point and boiling range:
Initial boiling point and boiling range:
Inot applicable
Inot applicable
Inot determined

Flammability

Gas: Extremely flammable.

Explosive properties

In use may form flammable/explosive vapour-air mixture.

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not determined

not determined

Auto-ignition temperature

Gas: not determined

Oxidizing properties

Oxidizing

Vapour pressure: not determined

(at 20 °C)

Density (at 20 °C): 0,784 - 0,786 g/cm³
Bulk density: not applicable
Water solubility: completely miscible

Solubility in other solvents

miscible with most organic solvents

Partition coefficient:

Viscosity / dynamic:

No data available

not determined

(at 20 °C)



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Viscosity / kinematic: not determined
Vapour density: not determined
Evaporation rate: not determined
Solvent content: ~70%

9.2. Other information

Temperature of decomposition in °C: not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No risks worthy of mention.

10.2. Chemical stability

No risks worthy of mention.

10.3. Possibility of hazardous reactions

Heating causes rise in pressure with risk of bursting. Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Remove all sources of ignition. Keep away from heat.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

Carbon monoxide Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
64-17-5	ethanol, ethyl alcohol					
	oral	LD50 mg/kg	10470	Rat	IUCLID	
	dermal	LD50 mg/kg	> 2000	Rabbit		
	inhalation (4 h) vapour	LC50	95,6 mg/l	Rat	RTECS	
106-97-8	butane					
	inhalation (4 h) aerosol	LC50	658 mg/l	Rat		
74-98-6	propane					
	inhalation (4 h) vapour	LC50	> 20 mg/l	Rat		

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

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.



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STOT-single exposure

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

STOT-repeated exposure

Based on available data, the classification criteria are not met. Vapours may cause drowsiness and dizziness.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
64-17-5	ethanol, ethyl alcohol							
	Acute fish toxicity	LC50 mg/l	8140		Leuciscus idus (golden orfe)			
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris			
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna	IUCLID		
74-98-6	propane							
	Acute fish toxicity	LC50 mg/l	> 100	96 h				
	Acute algae toxicity	ErC50 mg/l	> 100					
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h				

12.2. Persistence and degradability

Easily biodegradable (concerning to the criteria of the OECD)

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31
106-97-8	butane	2,89
74-98-6	propane	2,36

12.4. Mobility in soil

No information available.

Chemical Oyxgen Demand (COD): not determined Biochemical oxygen demand (BOD): not determined

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations

13.1. Waste treatment methods





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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

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded

chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous

waste

Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE

CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal

packaging waste); metallic packaging

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: UN1950 **14.2. UN proper shipping name:** AEROSOLS

14.3. Transport hazard class(es): 2
Hazard label: 2.1



Classification code: 5F

Special Provisions: 190 327 344 625

Limited quantity: 1 L
Transport category: 2
Tunnel restriction code: D

Other applicable information (land transport)

EQ: E0

Inland waterways transport (ADN)

14.1. UN number: UN1950 **14.2. UN proper shipping name:** AEROSOLS

14.3. Transport hazard class(es): 2
Hazard label: 2.1



Classification code: 5F

Special Provisions: 190 327 344 625

Limited quantity: 1 L

Other applicable information (inland waterways transport)

EQ: E0

Marine transport (IMDG)

14.1. UN number: UN1950





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14.2. UN proper shipping name: AEROSOLS

14.3. Transport hazard class(es): 2
14.4. Packing group: -

Hazard label: 2, see SP63



Special Provisions: 63, 190, 277, 327, 344, 959

Limited quantity: See SP277 EmS: F-D, S-U

Other applicable information (marine transport)

EQ: E0

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN1950

14.2. UN proper shipping name: AEROSOLS, flammable

14.3. Transport hazard class(es):2.1Hazard label:2.1



Special Provisions: A145 A167 A803

Limited quantity Passenger: 30 kg G

IATA-packing instructions - Passenger:203IATA-max. quantity - Passenger:75 kgIATA-packing instructions - Cargo:203IATA-max. quantity - Cargo:150 kg

Other applicable information (air transport)

EQ: E0

Passenger-LQ:

Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not determined

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3: ethanol, ethyl alcohol

Entry 28: butane

2004/42/EC (VOC): 100 % (784 g/l)

National regulatory information



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

protection guideline' (94/33/EC).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

section 5, 11, 15

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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

(Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

LD50: Lethal dose, 50 percent

LC50: Lethal concentration, 50 percent

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated

H319 Causes serious eye irritation.

Further Information

Data sources: safety data sheets of raw materials

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.)