



according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 1 of 12

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

1.1. Product identifier

NORD-TEST Rot 3000 Spray

Further trade names

Article no. (user): 121.300.301

UFI: DVJ5-JXK9-5Q68-7P3D

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

Use of the substance/mixture

Penetration test

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

1.4. Emergency telephone number:GIZ Nord Göttingen +49-(0)551-19240
(Information in German and English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Aerosol 1; H222-H229 Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

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.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
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 UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 2 of 12

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

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

P501 Dispose of contents/container to industrial incineration plant.

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 (GB CLP Regulation)				
115-10-6	dimethyl ether			15 - 25 %	
	204-065-8	603-019-00-8	01-2119472128-37		
	Flam. Gas 1; H220				
106-97-8	butane			10 - 20 %	
	203-448-7	601-004-00-0	01-2119474691-32		
	Flam. Gas 1; H220				
111-90-0	2-(2-ethoxyethoxy)ethanol			8 - 15 %	
	203-919-7		02-2119679655-21		
74-98-6	propane	3 - 6 %			
	200-827-9	601-003-00-5	01-2119486944-21		
	Flam. Gas 1; H220				
64-17-5	ethanol, ethyl alcohol				
	200-578-6	603-002-00-5	01-2119457610-43		
	Flam. Liq. 2, Eye Irrit. 2; H225	- 1319			
75-28-5	isobutane	1,5 - 2,0 %			
	200-857-2	601-004-00-0	01-2119485395-27		
	Flam. Gas 1, Compressed gas; H220 H280				
509-34-2	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one				
	208-096-8				
	Acute Tox. 4, Eye Irrit. 2, Aquatic Chronic 3; H302 H319 H412				

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



according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 3 of 12

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Con-	c. Limits, M-factors and ATE	
106-97-8	203-448-7	butane	10 - 20 %
	inhalation: L	_C50 = 658 mg/l (dusts or mists)	
111-90-0	203-919-7	2-(2-ethoxyethoxy)ethanol	8 - 15 %
	inhalation: L	_C50 = > 5,2 mg/l (vapours); dermal: LD50 = 5940 mg/kg; oral: LD50 = 5540 mg/kg	
74-98-6	200-827-9	propane	3 - 6 %
	inhalation: L	_C50 = > 20 mg/l (vapours)	
64-17-5	200-578-6	ethanol, ethyl alcohol	1 - 3 %
	inhalation: L	_C50 = 95,6 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 10470 mg/kg	
509-34-2	208-096-8	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one	1,2 - 1,6 %
	oral: LD50 =	= 1830 mg/kg	

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 all cases of doubt, or when symptoms persist, seek medical advice.

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. Induce vomiting when the affected person is not unconscious. Medical treatment necessary.

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

No information available.

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

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

Combustible. Vapours may form explosive mixtures with air.

Heating causes rise in pressure with risk of bursting.

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

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.



Helling GmbH

according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 4 of 12

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/vapour/aerosol. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion hazard.

6.3. Methods and material for containment and cleaning up

Other information

Ventilate affected area.

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

6.4. Reference to other sections

Disposal: see section 13.

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/vapour/aerosol. When using do not eat, drink or smoke. Use only in well-ventilated areas.

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.

Advice on general occupational hygiene

Change contaminated clothing. Wash hands before breaks and after work. Protect skin by using skin protective cream.

When using do not eat or drink.

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.

Hints on joint storage

Do not store together with: Oxidising agent

7.3. Specific end use(s)

Please refer to our internet website for more information: www.helling.de

SECTION 8: Exposure controls/personal protection

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
115-10-6	Dimethyl ether	400	766		TWA (8 h)	WEL
		500	958		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL



according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 5 of 12

DNEL/DMEL values

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
64-17-5	ethanol, ethyl alcohol				
Consumer DN	IEL, 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		
Environmental compartment Value			
64-17-5	ethanol, ethyl alcohol		
Freshwater		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		580 mg/l	
Soil		0,63 mg/kg	

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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

Before starting work, apply solvent-resistant skincare preparations.

Recommended protective gloves brand:

FKM (fluoro rubber) (0,4 mm)

Butyl caoutchouc (butyl rubber) (0,5 mm)

Break through time > 480 min

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.

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.





according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 6 of 12

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: red

Odour: characteristic

Changes in the physical state

Melting point/freezing point:

Boiling point or initial boiling point and

not applicable
not applicable

boiling range:

Flash point: not determined

Explosive properties

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

Lower explosion limits:

Upper explosion limits:

Auto-ignition temperature:

pH-Value:

Viscosity / dynamic:

Viscosity / kinematic:

Not applicable

Water solubility:

not applicable

emulsifiable

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: 3600 hPa

(at 20 °C)

Density (at 20 °C): 0,698 g/cm³

9.2. Other information

Other safety characteristics

Solvent separation test: not applicable Solvent content: < 12 %

Further Information

No information available.

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

Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.



Helling GmbH

according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 7 of 12

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
106-97-8	butane						
	inhalation (4 h) dust/mist	LC50	658 mg/l	Rat			
111-90-0	2-(2-ethoxyethoxy)ethar	nol					
	oral	LD50 mg/kg	5540	Rat			
	dermal	LD50 mg/kg	5940	Rat			
	inhalation (4 h) vapour	LC50	> 5,2 mg/l	Rat			
74-98-6	propane						
	inhalation (4 h) vapour	LC50	> 20 mg/l	Rat			
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		
509-34-2	3',6'-bis(diethylamino)sp	iro[isobenz	zofuran-1(3H)),9'-[9H]xanthene]-3-one			
	oral	LD50 mg/kg	1830	Rat			

Irritation and corrosivity

Causes serious eye irritation.

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

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.

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.

Aspiration hazard

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

11.2. Information on other hazards



according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 8 of 12

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
111-90-0	2-(2-ethoxyethoxy)ethanol							
	Acute fish toxicity	LC50 mg/l	12900	96 h	Oncorhynchus mykiss (Rainbow trout)			
	Acute crustacea toxicity	EC50 mg/l	3940	48 h	Daphnia magna			
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				
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		
509-34-2	3',6'-bis(diethylamino)spi	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one						
	Acute fish toxicity	LC50	40 mg/l		Leuciscus idus (golden orfe)			

12.2. Persistence and degradability

The product has not been tested.

Part of the components is biodegradable.

12.3. Bioaccumulative potential

The product has not been tested.

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
115-10-6	dimethyl ether	0,1
106-97-8	butane	2,89
74-98-6	propane	2,36
64-17-5	ethanol, ethyl alcohol	-0,31
75-28-5	isobutane	2,8

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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

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.





according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 9 of 12

12.7. Other adverse effects

Do not empty into drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

List of Wastes Code - 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

List of Wastes Code - 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

Water (with cleaning agent). Completely emptied packages can 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 or ID number: UN 1950 **14.2. UN proper shipping name:** AEROSOLS

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

Hazard label: 2.1



Classification code: 5F

Special Provisions: 190 327 344 625

Limited quantity:1 LExcepted quantity:E0Transport category:2Tunnel restriction code:D

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1950 **14.2. UN proper shipping name:** AEROSOLS

14.3. Transport hazard class(es):214.4. Packing group:-Hazard label:2.1



Classification code: 5F

Special Provisions: 190 327 344 625

Limited quantity: 1 L
Excepted quantity: E0

Marine transport (IMDG)

14.1. UN number or ID number: UN 1950





according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 10 of 12

14.2. UN proper shipping name: AEROSOLS

Hazard label: 2.1



Special Provisions: 63, 190, 277, 327, 344, 381, 959

Limited quantity: 1000 mL Excepted quantity: E0 EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1950

14.2. UN proper shipping name: AEROSOLS, FLAMMABLE

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



Special Provisions: A145 A167 A802

Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0

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

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

none

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 28, Entry 40, Entry 75

2004/42/EC (VOC): 57,55 % (401,699 g/l)

Additional information

aerosol directive (75/324/EEC).

Safety data sheet available for professional user on request.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.





according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 11 of 12

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: 2-(2-ethoxyethoxy)ethanol

SECTION 16: Other information

Changes

section 2, 3, 5, 8, 9, 10, 11, 12, 15, 16

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

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

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

SVHC: Substance of Very High Concern

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Eye Irrit. 2; H319	Bridging principle "Aerosols"

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.





according to UK REACH Regulation

NORD-TEST Rot 3000 Spray

Revision date: 15.07.2022 Page 12 of 12

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

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.)