Safety Data Sheet

according to Regulation (EC) No 1907/2006

NORD-TEST Rot 3000 Spray

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:

Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

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

Full text of hazard statements: see SECTION 16.

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.
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.

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			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
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			1 - 3 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			
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			1,2 - 1,6 %
	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.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
106-97-8	203-448-7	butane	10 - 20 %
	inhalation: LC50 = 658 mg/l (dusts or mists)		
111-90-0	203-919-7	2-(2-ethoxyethoxy)ethanol	8 - 15 %
	inhalation: LC50 = > 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: LC50 = > 20 mg/l (vapours)		
64-17-5	200-578-6	ethanol, ethyl alcohol	1 - 3 %
	inhalation: LC50 = 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.

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

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	
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/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.

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	
Melting point/freezing point:		not applicable
Boiling point or initial boiling point and boiling range:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not determined
Auto-ignition temperature:		not determined
pH-Value:		not applicable
Viscosity / kinematic:		not applicable
Water solubility:		emulsifiable

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	3600 hPa
Density (at 20 °C):	0,698 g/cm³

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

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

Other safety characteristics

Solvent separation test:	not applicable
Solvent content:	< 12 %
Viscosity / dynamic:	not applicable

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.

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 Regulation (EC) No 1272/2008

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation gas) > 20000 ppm

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)ethanol				
	oral	LD50 5540 mg/kg	Rat		
	dermal	LD50 5940 mg/kg	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 10470 mg/kg	Rat	IUCLID	
	dermal	LD50 > 2000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 95,6 mg/l	Rat	RTECS	
509-34-2	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one				
	oral	LD50 1830 mg/kg	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

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	96 h	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)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one						
	Acute fish toxicity	LC50	40 mg/l	96 h	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 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

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 L
Excepted quantity:	E0
Transport category:	2
Tunnel 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):	2
14.4. 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
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1

14.4. Packing group: -
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: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-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.

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 1, 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
Flam. Gas: Flammable gases
Aerosol: Aerosols
Compressed gas: Compressed gas
Flam. Liq: Flammable liquids
Acute Tox: Acute toxicity
Eye Irrit: Eye irritation
Aquatic Chronic: Chronic aquatic hazard

Key literature references and sources for data

Adaptation to Regulation (EU) 2020/878

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

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.
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.)