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

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)511-19240
(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

Hazard components for labelling

3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one

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.
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 according to Regulation (EC) No. 1272/2008 [CLP]			
74-98-6	propane			25 - 30 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1; H220			
111-90-0	2-(2-ethoxyethoxy)ethanol			10 - 12 %
	203-919-7		02-2119679655-21	
106-97-8	butane			7 - 10 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1; H220			
64-17-5	ethanol, ethyl alcohol			1 - 4 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			
509-34-2	3',6'-bis(diethylamino)spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3-one			1,4 - 1,8 %
	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.

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.

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

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

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

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.

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.

Advice on storage compatibility

Do not store together with: Oxidising agent

7.3. Specific end use(s)

Please refer to our internet website for more information: www.hellinggmbh.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
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	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

Provide adequate ventilation. Do not breathe gas/vapour/aerosol.

Protective and hygiene measures

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

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

	Test method
pH-Value:	not applicable
Changes in the physical state	
Melting point:	not applicable
Initial boiling point and boiling range:	not applicable
Flash point:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined
Vapour pressure: (at 20 °C)	3600 hPa
Density (at 20 °C):	0,698 g/cm³
Water solubility:	emulsifiable

Solubility in other solvents

not determined

Partition coefficient:	not determined
Viscosity / dynamic:	not applicable
Viscosity / kinematic:	not applicable
Solvent separation test:	not applicable
Solvent content:	< 12 %

9.2. Other 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

Carbon dioxide. Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
74-98-6	propane					
	inhalative (4 h) vapour	LC50	> 20 mg/l	Rat		
111-90-0	2-(2-ethoxyethoxy)ethanol					
	oral	LD50 mg/kg	5540	Rat		
	dermal	LD50 mg/kg	5940	Rat		
	inhalative (4 h) vapour	LC50	> 5,2 mg/l	Rat		
106-97-8	butane					
	inhalative (4 h) aerosol	LC50	658 mg/l	Rat		
64-17-5	ethanol, ethyl alcohol					
	oral	LD50 mg/kg	10470	Rat	IUCLID	
	dermal	LD50 mg/kg	> 2000	Rabbit		
	inhalative (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 mg/kg	1830	Rat		

Irritation and corrosivity

Irritant effect on the eye: Causes serious eye irritation.
Irritant effect on the skin: slightly irritant but not relevant for classification.

Sensitising effects

No sensitizing effect known.

Carcinogenic/mutagenic/toxic effects for reproduction

According to current knowledge not a carcinogen. According to current knowledge not mutagen. According to current knowledge not reproduction toxic.

STOT-single exposure

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

STOT-repeated exposure

No data available

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
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			
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		
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
74-98-6	propane	2,36
106-97-8	butane	2,89
64-17-5	ethanol, ethyl alcohol	-0,31

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

Do not empty into drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

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 Classified as 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

Water (with cleaning agent). Completely emptied packages can be recycled.

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)

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)

Marine transport (IMDG)

14.1. UN number:	UN1950
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)

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):	2.1
Hazard label:	2.1

Special Provisions:	A145 A167 A803
Limited quantity Passenger:	30 kg G
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-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

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 3: ethanol, ethyl alcohol
Entry 28: butane

2004/42/EC (VOC): 38 % (265,24 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 contaminating class (D): 1 - slightly water contaminating

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 8

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 Harmonized 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
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

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.
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.)