

## Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 26.05.2010

Revision: 09.05.2010

### 1 Identification of the substance/preparation and of the company/undertaking

- Product details
- Trade name: DINITROL RC 900 SPRAY
- Application of the substance / the preparation  
Entroster, Haftgrundierung, Rostumwandler / Primer and rustconverter
- Manufacturer/Supplier:  
DINOL GmbH  
Pyrmonter Strasse 76  
DE - 32676 Lügde  
  
Tel. +49/ (0)5281 98298 -0  
Fax +49/ (0)5281 98298 -60
- Further information obtainable from:  
Tel. +49 (0) 5281 98 298 0, Fax. +49 (0) 5281 98 298 60  
Ansprechpartner: Dr. T. Sürig  
thomas.suerig@dinol.com
- Information in case of emergency:  
Giftnotruf Berlin +49 (0)30 30686 790 Beratung in Deutsch und Englisch/  
Information in German and English

### 2 Hazards identification

- Hazard description:  

		Xi Irritant F+ Extremely flammable
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- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
Warning! Pressurized container.  
R 12 Extremely flammable.  
R 36 Irritating to eyes.  
R 67 Vapours may cause drowsiness and dizziness.  
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.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- GHS label elements  

	<b>Danger</b>
H222 - Extremely flammable aerosol.	
	<b>Warning</b>
H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.	

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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.

• Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P251 Pressurized container: Do not pierce or burn, even after use.

• Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

• Storage:

P405 Store locked up.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

• Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition/information on ingredients

• Chemical characterization

• Description:

Mixture of substances listed below with nonhazardous additions.

• Dangerous components:

CAS: 67-64-1 EINECS: 200-662-2	acetone ☒ Xi, ☒ F; R 11-36-66-67 Danger: ☒ 2.6/2 Warning: ☒ 3.3/2, 3.8/3	25-50%
CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one ☒ Xn, ☒ Xi, ☒ F; R 11-20-36/37-66 Danger: ☒ 2.6/2 Warning: ☒ 3.1.I/4, 3.3/2, 3.8/3	2.5-10%
CAS: 107-98-2 EINECS: 203-539-1	1-methoxy-2-propanol R 10 Warning: ☒ 2.6/3	2.5-10%
CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol ☒ Xi, ☒ F; R 11-36-67 Danger: ☒ 2.6/2 Warning: ☒ 3.3/2, 3.8/3	2.5-10%
CAS: 10024-97-2 EINECS: 233-032-0	dinitrogen oxide Warning: ☒ 2.5/L	2.5-10%
CAS: 64-18-6 EINECS: 200-579-1	formic acid ☒ C; R 35 Danger: ☒ 3.2/1A	≤2.0%
CAS: 112-34-5 EINECS: 203-961-6	2-(2-butoxyethoxy)ethanol ☒ Xi; R 36 Warning: ☒ 3.3/2	≤2.0%

• Additional information:

For the wording of the listed risk phrases refer to section 16.

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### 4 First aid measures

- After inhalation:  
Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact:  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing:  
A person vomiting while laying on their back should be turned onto their side.

### 5 Fire-fighting measures

- Suitable extinguishing agents:  
CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards caused by the substance, its products of combustion or resulting gases:  
Formation of toxic gases is possible during heating or in case of fire.
- Protective equipment: No special measures required.
- Additional information Cool endangered receptacles with water spray.

### 6 Accidental release measures

- Person-related safety precautions:  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection:  
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.
- Measures for cleaning/collecting:  
Dispose of the material collected according to regulations.  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents

### 7 Handling and storage

- Handling:
- Information for safe handling:  
Store in cool, dry place in tightly closed receptacles.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- Information about fire - and explosion protection:  
Do not spray onto a naked flame or any incandescent material.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

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- Storage:
- Requirements to be met by storerooms and receptacles:  
Store in a cool location.  
Observe official regulations on storing packagings with pressurized containers.
- Information about storage in one common storage facility:  
Store away from foodstuffs.
- Further information about storage conditions:  
Keep container tightly sealed.  
Do not seal receptacle gas tight.  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.

### 8 Exposure controls/personal protection

- Additional information about design of technical facilities:  
No further data; see item 7.

- Ingredients with limit values that require monitoring at the workplace:

<b>67-64-1 acetone</b>	
WEL (Great Britain)	Short-term value: 3620 mg/m <sup>3</sup> , 1500 ppm Long-term value: 1210 mg/m <sup>3</sup> , 500 ppm
NES (Australia)	Short-term value: 2375 mg/m <sup>3</sup> , 1000 ppm Long-term value: 1185 mg/m <sup>3</sup> , 500 ppm
WES (New Zealand)	Short-term value: 2375 mg/m <sup>3</sup> , 1000 ppm Long-term value: 1185 mg/m <sup>3</sup> , 500 ppm bio
<b>108-10-1 4-methylpentan-2-one</b>	
WEL (Great Britain)	Short-term value: 416 mg/m <sup>3</sup> , 100 ppm Long-term value: 208 mg/m <sup>3</sup> , 50 ppm Sk
NES (Australia)	Short-term value: 307 mg/m <sup>3</sup> , 75 ppm Long-term value: 205 mg/m <sup>3</sup> , 50 ppm
WES (New Zealand)	Short-term value: 307 mg/m <sup>3</sup> , 75 ppm Long-term value: 205 mg/m <sup>3</sup> , 50 ppm
<b>107-98-2 1-methoxy-2-propanol</b>	
WEL (Great Britain)	Short-term value: 560 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm Sk
NES (Australia)	Short-term value: 553 mg/m <sup>3</sup> , 150 ppm Long-term value: 369 mg/m <sup>3</sup> , 100 ppm
WES (New Zealand)	Short-term value: 553 mg/m <sup>3</sup> , 150 ppm Long-term value: 369 mg/m <sup>3</sup> , 100 ppm
<b>67-63-0 propan-2-ol</b>	
WEL (Great Britain)	Short-term value: 1250 mg/m <sup>3</sup> , 500 ppm Long-term value: 999 mg/m <sup>3</sup> , 400 ppm
NES (Australia)	Short-term value: 1230 mg/m <sup>3</sup> , 500 ppm Long-term value: 983 mg/m <sup>3</sup> , 400 ppm
WES (New Zealand)	Short-term value: 1230 mg/m <sup>3</sup> , 500 ppm Long-term value: 983 mg/m <sup>3</sup> , 400 ppm
<b>10024-97-2 dinitrogen oxide</b>	
WEL (Great Britain)	Long-term value: 183 mg/m <sup>3</sup> , 100 ppm
NES (Australia)	Long-term value: 45 mg/m <sup>3</sup> , 25 ppm
WES (New Zealand)	Long-term value: 45 mg/m <sup>3</sup> , 25 ppm

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<b>64-18-6 formic acid</b>	
WEL (Great Britain)	Long-term value: 9.6 mg/m <sup>3</sup> , 5 ppm
NES (Australia)	Short-term value: 19 mg/m <sup>3</sup> , 10 ppm
	Long-term value: 9.4 mg/m <sup>3</sup> , 5 ppm
WES (New Zealand)	Short-term value: 19 mg/m <sup>3</sup> , 10 ppm
	Long-term value: 9.4 mg/m <sup>3</sup> , 5 ppm
<b>112-34-5 2-(2-butoxyethoxy)ethanol</b>	
WEL (Great Britain)	Short-term value: 101.2 mg/m <sup>3</sup> , 15 ppm
	Long-term value: 67.5 mg/m <sup>3</sup> , 10 ppm

- Additional information:  
The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
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 eyes.  
Avoid contact with the eyes and skin.
- Respiratory protection:  
Use suitable respiratory protective device in case of insufficient ventilation.
- Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- 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.
- Eye protection:



Tightly sealed goggles

### 9 Physical and chemical properties

- General Information

Form:

Fluid

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<u>Colour:</u>	Amber coloured
<u>Odour:</u>	Characteristic
• <u>Change in condition</u>	
<u>Melting point/Melting range:</u>	Undetermined.
<u>Boiling point/Boiling range:</u>	55°C
• <u>Flash point:</u>	13°C
• <u>Ignition temperature:</u>	270°C
• <u>Self-igniting:</u>	Product is not selfigniting.
• <u>Danger of explosion:</u>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
• <u>Explosion limits:</u>	
<u>Lower:</u>	2.6 Vol %
<u>Upper:</u>	13.0 Vol %
• <u>Vapour pressure at 20°C:</u>	233 hPa
• <u>Density at 20°C:</u>	1 g/cm <sup>3</sup>
• <u>Solubility in / Miscibility with water:</u>	Not miscible or difficult to mix.
• <u>pH-value at 20°C:</u>	4
• <u>Solvent content:</u>	
<u>Organic solvents:</u>	63.1 %

### 10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:  
No decomposition if used and stored according to specifications.
- Materials to be avoided: Starke Oxidationsmittel/strong oxidising agent
- Dangerous reactions Danger of bursting.
- Dangerous decomposition products:  
No dangerous decomposition products known.

### 11 Toxicological information

- Acute toxicity:
- Primary irritant effect:
- on the skin:  
Bei längeren und/oder häufigem Hautkontakt sind Reizerscheinungen möglich.  
Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- 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:  
Irritant

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### 12 Ecological information

- Additional ecological information:
- General notes:  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 13 Disposal considerations

- Product:
- Recommendation  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- European waste catalogue

16 05 04*	gases in pressure containers (including halons) containing dangerous substances
20 01 27*	paint, inks, adhesives and resins containing dangerous substances

- Uncleaned packaging:
- Recommendation:  
Disposal must be made according to official regulations.

### 14 Transport information

- Land transport ADR/RID (cross-border)



- ADR/RID class: 2 5F Gases.
- Danger code (Kemler): -
- UN-Number: 1950
- Packaging group: -
- Hazard label: 2.1
- Description of goods: 1950 AEROSOLS
- Tunnel restriction code D

- Maritime transport IMDG:



- IMDG Class: 2.1
- UN Number: 1950
- Label 2.1
- Packaging group: -
- EMS Number: F-D,S-U
- Marine pollutant: No

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- Proper shipping name: AEROSOLS
- Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 2.1
- UN/ID Number: 1950
- Label 2.1
- Packaging group: -
- Proper shipping name: AEROSOLS, flammable
- UN "Model Regulation": UN1950, AEROSOLS, 2.1

### 15 Regulatory information

- Labelling according to EU guidelines:  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- Code letter and hazard designation of product:



Xi Irritant  
F+ Extremely flammable

- Risk phrases:  
12 Extremely flammable.  
36 Irritating to eyes.  
67 Vapours may cause drowsiness and dizziness.
- Safety phrases:  
2 Keep out of the reach of children.  
16 Keep away from sources of ignition - No smoking.  
23 Do not breathe aerosol.  
29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.  
46 If swallowed, seek medical advice immediately and show this container or label.  
51 Use only in well-ventilated areas.
- Special labelling of certain preparations:  
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.
- Classification in accordance with Directive 75/324/EEC:  
Extremely flammable

### 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 R-phrases  
10 Flammable.  
11 Highly flammable.  
20 Harmful by inhalation.

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- 35 Causes severe burns.
- 36 Irritating to eyes.
- 36/37 Irritating to eyes and respiratory system.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

- Department issuing MSDS: Abteilung Produktsicherheit
- Contact: siehe Seite 1 / see page 1

- 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

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals