

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** Roti®-NC, 20 x 300 cm**Article number:** HP41**Registration number** Mixture - Registration numbers of the components, see Chapter 3**1.2 Relevant identified uses of the substance or mixture and uses advised against****Application of the substance / the mixture**

Auxiliary

**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Carl Roth GmbH + Co.KG

Schoemperlenstraße 3-5

76185 Karlsruhe

Germany

Telefon: +49/(0)721 5606-0

Telefax: +49/(0)721 5606-149

e-mail: sicherheit@carlroth.de

**Further information obtainable from:** Department Health, Safety and Environment**1.4 Emergency telephone number:**

Poison Centre Munich

Telefon +49/(0)89 19240

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Flam. Sol. 1 H228 Flammable solid.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

F; Highly flammable

R11: Highly flammable.

**Information concerning particular hazards for human and environment:**

This product is hazardous according to EEC directives 67/548/EEC and 1999/45/EC.

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms**

GHS02

**Signal word** Danger**Hazard statements**

H228 Flammable solid.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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P370+P378 In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

**Additional information:**

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**Labelling of packages where the contents do not exceed 125 ml**

**Hazard pictograms**



GHS02

**Signal word** Danger

**Hazard statements** Void

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**2.3 Other hazards**

All chemicals are potentially dangerous. They are therefore only be handled by specially trained personnel with the necessary care.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.



**vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

**3.2 Chemical characterisation: Mixtures**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

9004-70-0	Nitrocellulose	 F R11  Flam. Sol. 1, H228	50-100%
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**Additional information:** For the wording of the listed risk phrases refer to section 16.

**SECTION 4: First aid measures**



**4.1 Description of first aid measures**

**General information:**

No special measures required.

**After inhalation:**

Inhalation is unlikely to occur.

**After skin contact:**

No special measures required.

**After eye contact:**

Eye contact is unlikely to occur.

**After swallowing:**

Ingestion is unlikely to occur.

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

We have no description of any toxic symptoms.

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

No further relevant information available.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**For safety reasons unsuitable extinguishing agents:** Water with full jet

#### 5.2 Special hazards arising from the substance or mixture

In the event of fire development of hazardous combustion gases or vapours possible.

In case of fire, the following can be released:

Hydrogen cyanide (HCN)  
Carbon monoxide and carbon dioxide

#### 5.3 Advice for firefighters

##### Protective equipment:

Wear self-contained respiratory protective device.  
Wear fully protective suit.

### SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures** Not required.

#### 6.2 Environmental precautions

Do not allow to enter sewers/ground water or penetrate the soil.

#### 6.3 Methods and material for containment and cleaning up

Pick up mechanically.  
Dispose of the material collected according to regulations.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Handling corresponding to laboratory safety guidelines.

##### Information about fire - and explosion protection:



Keep ignition sources away - Do not smoke.

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## 7.2 Conditions for safe storage, including any incompatibilities

### Storage:

#### **Requirements to be met by storerooms and receptacles:**

No special requirements.

#### **Information about storage in one common storage facility:**

Store away from foodstuffs.

#### **Further information about storage conditions:**

Keep container tightly sealed.

**Recommended storage temperature:** 15 - 25 °C

## 7.3 Specific end use(s)

No further relevant information available.

## SECTION 8: Exposure controls/personal protection

### **Additional information about design of technical facilities:**

No further data; see item 7.

## 8.1 Control parameters

### **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

### **Additional information:**

The lists valid during the making were used as basis.

## 8.2 Exposure controls

### Personal protective equipment:

#### **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

#### **Individual protection measures**

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

#### **Respiratory protection:**



Filter P1 (colour code: white)  
Required when dusts are generated.

#### **Protection of hands:**



Protective gloves

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**Nitrile, thickness:  $\geq 0.11$  mm

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**Value for the permeation: Level  $\geq 6$ 

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**As protection from splashes gloves made of the following materials are suitable:**Nitrile rubber, thickness:  $\geq 0.11$  mmValue for the permeation: Level  $\geq 6$ **Eye protection:**

Tightly sealed goggles

**Body protection:**

Protective work clothing

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	paper
<b>Colour:</b>	White
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

<b>pH-value:</b>	Not applicable.
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**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

<b>Flash point:</b>	Not applicable.
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<b>Flammability (solid, gaseous):</b>	Flammable solid.
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<b>Ignition temperature:</b>	> 180 °C
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<b>Decomposition temperature:</b>	Not determined.
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<b>Self-igniting:</b>	Product is not self-igniting.
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<b>Danger of explosion:</b>	Not determined.
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**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

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# Safety data sheet

according to 1907/2006/EC, Article 31



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<b>Oxidizing properties:</b>	No information available.
<b>Vapour pressure:</b>	Not applicable.
<b>Density:</b>	Not determined.
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Solubility in / Miscibility with water:</b>	Insoluble.
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.
<b>Solvent content:</b>	
<b>Solids content:</b>	100.0 %
<b>9.2 Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

See section 10.3

### 10.2 Chemical stability

#### Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

### 10.3 Possibility of hazardous reactions

Exothermic reaction with:

Strong oxidants

### 10.4 Conditions to avoid

Heat, flammes and sparks

### 10.5 Incompatible materials:

No information available.

### 10.6 Hazardous decomposition products:

Nitrogen oxides

Hydrogen cyanide (prussic acid)

In case of fire: see item 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity:

#### **LD/LC50 values relevant for classification:**

Quantitative data on the toxicity of this product are not available.

#### **Specific symptoms in biological assay:**

No information available.

#### Primary irritant effect:

#### **on the skin:**

No irritating effect.

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**on the eye:**

No irritating effect.

**after inhalation:**

No irritating effect.

**Sensitisation:**

No sensitising effects known.

**CMR effects:****Germ cell mutagenicity:**

No known significant effects or critical hazards.

**Carcinogenicity:**

No known significant effects or critical hazards.

**Reproductive toxicity:**

No known significant effects or critical hazards.

**Aspiration hazard:**

Not applicable.

**Specific target organ toxicity - single exposure**

The substance or mixture is not classified as specific target organ toxicant, single exposure.

**Specific target organ toxicity - repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Additional toxicological information:**

No information available.

**Further information:**

The product should be handled with the care usual when dealing with chemicals.

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:**

Quantitative data on the ecological effect of this product are not available.

**12.2 Persistence and degradability**

No further relevant information available.

**12.3 Bioaccumulative potential**

No further relevant information available.

**12.4 Mobility in soil**

No further relevant information available.

**Ecotoxicological effects:****Remark:**

Do not allow to enter waters, waste water, or soil!

**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects**

No further relevant information available.

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### SECTION 13: Disposal considerations

#### Waste treatment methods

##### Recommendation

This material and its container must be disposed of as hazardous waste.  
The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.

##### Uncleaned packaging:

##### Recommendation:

Disposal according to official regulations.

### SECTION 14: Transport information

#### 14.1 UN-Number

ADR, IMDG, IATA UN3270

#### 14.2 UN proper shipping name

ADR 3270 NITROCELLULOSE MEMBRANE FILTER  
IMDG, IATA NITROCELLULOSE MEMBRANE FILTER

#### 14.3 Transport hazard class(es)

ADR, IMDG, IATA



Class 4.1 Flammable solids, self-reactive substances and solid desensitised explosives.

Label 4.1

#### 14.4 Packing group

ADR, IMDG, IATA II

#### 14.5 Environmental hazards:

Marine pollutant: No

#### 14.6 Special precautions for user

Warning: Flammable solids, self-reactive substances and solid desensitised explosives.

Danger code (Kemler): -

EMS Number: F-A,S-I

#### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

#### Transport/Additional information:

##### ADR

Limited quantities (LQ) 1 kg

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

Transport category 2

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<b>Tunnel restriction code</b>	E
<b>IMDG</b>	
<b>Limited quantities (LQ)</b>	1 kg
<b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
<b>UN "Model Regulation":</b>	UN3270, NITROCELLULOSE MEMBRANE FILTER, 4.1, II

## SECTION 15: Regulatory information

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

#### National regulations:

#### Information about limitation of use:

In dealing with chemicals the national laws must be observed.  
Employment restrictions concerning juveniles must be observed.

#### Breakdown regulations:

#### Waterhazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## SECTION 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 phrases

H228 Flammable solid.

R11 Highly flammable.

**Department issuing MSDS:** Department: Health, Safety and Environment

**Contact:** Herr Dr. Hagel

#### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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 Harmonised 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 (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

LD50\*: Lethal Dose, 50 percent (Not relevant for classification)

LD50\*: Lethal Concentration, 50 percent (Not relevant for classification)

Flam. Sol. 1: Flammable solids, Hazard Category 1

**\* Data compared to the previous version altered.**