



## SAFETY DATA SHEET of:

Fixativ Basic Spray

Revision date: Monday, February 3, 2014

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

#### 1.1 Product identifier:

7300.500 Fixativ Basic Spray Transparent

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

/

Concentration in use: /

#### 1.3 Details of the supplier of the safety data sheet:

Rico Design GmbH & Co. KG

Industriestrasse 19-23

D-33034 Brakel

Tel: (+49) (0)5272 602-0 — Fax: (+49) (0)5272 602-93

#### 1.4 Emergency telephone number:

003270245245

### 2 Hazards identification:

#### 2.1 Classification of the substance or mixture:

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008:

**H222 Flam. Aerosol 1 H229 H319 Eye Irrit. 2 H336 STOT SE 3**

Classification of the substance or mixture in accordance with regulation 67/548/EC:

**R12: Extremely flammable R36: Irritant R67**

#### 2.2

##### Label elements:

Symbols:



Signal word:

Danger

Risk Phrases:

**H222 Flam. Aerosol 1:** Extremely flammable aerosol.  
**H229:** Pressurised container: May burst if heated.  
**H319 Eye Irrit. 2:** Causes serious eye irritation.  
**H336 STOT SE 3:** May cause drowsiness or dizziness.

Safety phrases:

**P210:** Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
**P251:** Pressurized container: Do not pierce or burn, even after use.  
**P304+P340:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
**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.

Contains:

none

2.3 Other hazards:

none

3 Composition/information on ingredients:

Methyl ethyl ketone	< 5%	CAS number: 78-93-3 EINECS: 201-159-0 REACH Registration number: 01-2119457290-43 CLP Classification: <b>EUH066</b> <b>H225 Flam. Liq. 2</b> <b>H319 Eye Irrit. 2</b> <b>H336 STOT SE 3</b> R-Phrases: <b>R11 R36 R66</b> <b>R67</b>
Isopropanol	15% - 30%	CAS number: 67-63-0 EINECS: 200-661-7 REACH Registration number: 01-2119457558-25 CLP Classification: <b>H225 Flam. Liq. 2</b> <b>H319 Eye Irrit. 2</b> <b>H336 STOT SE 3</b> R-Phrases: <b>R11 R36 R67</b>
Ethanol	> 30%	CAS number: 64-17-5 EINECS: 200-578-6 REACH Registration number: 01-2119457610-43 CLP Classification: <b>H225 Flam. Liq. 2</b> R-Phrases: <b>R11</b>

n-Butane (<0,01% Butadiene -1,3)	5% - 15%	CAS number: 106-97-8 EINECS: 203-448-7 REACH Registration number: Annex V CLP Classification: <b>H220 Flam. Gas 1</b> R-Phrases: <b>R12</b>
Propane	5% - 15%	CAS number: 74-98-6 EINECS: 200-827-9 REACH Registration number: Annex V CLP Classification: <b>H220 Flam. Gas 1</b> R-Phrases: <b>R12</b>

For the full text of the H & R phrases mentioned in this section, see section 16.

## 4 First aid measures:

### 4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

<b>Skin contact:</b>	remove contaminated clothing, rinse with plenty of water, if necessary seek medical attention.
<b>Eye contact:</b>	first prolonged rinsing with water (contact lenses to be removed if this is easily done) then take to physician.
<b>Ingestion:</b>	rinse mouth, do not induce vomiting, take to hospital immediately.
<b>Inhalation:</b>	let sit upright, fresh air, rest and take to hospital.

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

<b>Skin contact:</b>	redness, pain
<b>Eye contact:</b>	redness, pain, bad looking
<b>Ingestion:</b>	diarrhoea, headache, abdominal cramps, sleepiness, vomiting
<b>Inhalation:</b>	sore throat, cough, shortness of breath, headache

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

none

## 5 Fire-fighting measures:

### 5.1 Extinguishing media:

CO2, foam, powder, sprayed water

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

none

### 5.3 Advice for fire-fighters:

**Extinguishing agents to be avoided:** none

## 6 Accidental release measures:

### 6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

### 6.2 Environmental precautions:

do not allow to flow into sewers or open water.

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

remove by using absorbent material.

### 6.4 Reference to other sections:

for further information check sections 8 & 13.

## 7 Handling and storage:

### 7.1 Precautions for safe handling:

handle with care to avoid spillage.

### 7.2 Conditions for safe storage, including any incompatibilities:

keep in a sealed container in a closed, frost-free, ventilated room.

### 7.3 Specific end use(s):

/

## 8 Exposure controls/personal protection:

### 8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the TLV value is known

n-Butane (<0,01% Butadiene -1,3) 1,928 mg/m<sup>3</sup>, Ethanol 1,907 mg/m<sup>3</sup>, Isopropanol 997 mg/m<sup>3</sup>, Methyl ethyl ketone 600 mg/m<sup>3</sup>

### 8.2 Exposure controls:

<b>Inhalation protection:</b>	if necessary, use an air-purifying face mask in case of respiratory hazards.	
<b>Skin protection:</b>	handling with butyl-gloves. Thoroughly check gloves before use. Take of the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
<b>Eye protection:</b>	keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	
<b>Other protection:</b>	impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	

## 9 Physical and chemical properties:

### 9.1 Information on basic physical and chemical properties:

<b>Melting point/melting range:</b>	/
<b>Boiling point/Boiling range:</b>	-140 °C
<b>pH:</b>	/
<b>pH 1% diluted in water:</b>	/
<b>Vapour pressure/20°C,:</b>	853 000 Pa
<b>Vapour density:</b>	not applicable
<b>Relative density, 20°C:</b>	0.791 kg/l
<b>Appearance/20°C:</b>	liquid
<b>Flash point:</b>	11 °C
<b>Flammability (solid, gas):</b>	not applicable
<b>Auto-ignition temperature:</b>	365 °C
<b>Upper flammability or explosive limit, (Vol %):</b>	9.500 %
<b>Lower flammability or explosive limit, (Vol %):</b>	1.800 %
<b>Explosive properties:</b>	not applicable
<b>Oxidising properties:</b>	not applicable
<b>Decomposition temperature:</b>	/
<b>Solubility in water:</b>	not soluble
<b>Partition coefficient: n-octanol/water:</b>	not applicable
<b>Odour:</b>	characteristic
<b>Odour threshold:</b>	not applicable
<b>Dynamic viscosity, 20°C:</b>	1 mPa.s
<b>Kinematic viscosity, 20°C:</b>	1 mm <sup>2</sup> /s
<b>Evaporation rate (n-BuAc = 1):</b>	3.700

### 9.2 Other information:

<b>Volatile organic component (VOC):</b>	97.40 %
<b>Volatile organic component (VOC):</b>	721.008 g/l

## 10 Stability and reactivity:

### 10.1 Reactivity:

stable under normal conditions.

### 10.2 Chemical stability:

extremely high or low temperatures.

### 10.3 Possibility of hazardous reactions:

none

### 10.4 Conditions to avoid:

protect from sunlight and do not expose to temperatures exceeding + 50°C.

### 10.5 Incompatible materials:

keep away from sources of ignition

### 10.6 Hazardous decomposition products:

doesn't decompose with normal use

## 11 Toxicological information:

### 11.1 Information on toxicological effects:

**About the preparation itself:** not applicable under actual EEC guidelines for preparations.

**General information:** See ingredients under section 3

**Calculated acute toxicity, LD50 oral rat:** /

**Calculated acute toxicity, LD50 dermal rat:** /

## 12 Ecological information:

### 12.1 Toxicity:

not applicable under actual EEC guidelines for preparations.

### 12.2 Persistence and degradability:

not applicable under actual EEC guidelines for preparations.

### 12.3 Bioaccumulative potential:

not applicable under actual EEC guidelines for preparations.

### 12.4 Mobility in soil:

**Water hazard class, WGK:** 1

**Solubility in water:** not soluble

### 12.5 Results of PBT and vPvB assessment:

not applicable under actual EEC guidelines for preparations.

### 12.6 Other adverse effects:

not applicable under actual EEC guidelines for preparations.

## 13 Disposal considerations:

### 13.1 Waste treatment methods:

Draining into the sewers is not permitted. Removal should be carried out by licensed services. Possible restrictive regulations by local authority should always be adhered to.

## 14 Transport information:

#### 14.1 UN number:

1950

#### 14.2 UN proper shipping name:

UN 1950 Aerosols, flammable, 5F, (D)

#### 14.3 Transport hazard class(es):

**Class(es):** 5F  
**Identification number of the hazard:** not applicable

#### 14.4 Packing group:

not applicable

#### 14.5 Environmental hazards:

not dangerous to the environment

#### 14.6 Special precautions for user:

**Hazard characteristics:** Risk of fire. Risk of explosion. Containers may explode when heated.  
**Additional guidance:** Take cover. Keep out of low areas. Prevent leaking substances from running into the aquatic environment or the sewage system.



## 15 Regulatory information:

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

**Water hazard class, WGK:** 1  
**Volatile organic component (VOC):** 97.400 %  
**Volatile organic component (VOC):** 721.008 g/l  
**Composition by regulation (EC 648/2004):** Aliphatic hydrocarbons 15% - 30%

#### 15.2 Chemical Safety Assessment:

No data available

## 16 Other information:

#### Legend to abbreviations used in the safety data sheet:

**DPD:** Dangerous Preparations Directive  
**WGK 1:** slightly hazardous for water  
**WGK:** Water hazard class

<b>WGK 2:</b>	hazardous for water
<b>ADR:</b>	Accord européen relatif au transport international des marchandises Dangereuses par Route
<b>CLP:</b>	Classification, Labelling and Packaging of chemicals
<b>WGK3:</b>	extremely hazardous for water
<b>EINECS:</b>	European INventory of Existing Commercial chemical Substances
<b>CAS:</b>	Chemical Abstracts Service
<b>Nr.:</b>	number
<b>PTB:</b>	persistent, toxic, bioaccumulative
<b>zPzB:</b>	very persistent and very bioaccumulative substances
<b>TLV:</b>	Threshold Limit Value

**Legend to the R & H Phrases used in the safety data sheet:**

**R11:** Highly flammable.      **R12:** Extremely flammable.      **R36:** Irritating to eyes.      **R66:** Repeated exposure may cause skin dryness or cracking  
**R67:** Vapours may cause drowsiness and dizziness

**EUH066:** Repeated exposure may cause skin dryness or cracking.      **H220 Flam. Gas 1:** Extremely flammable gas.  
**H222 Flam. Aerosol 1:** Extremely flammable aerosol.      **H225 Flam. Liq. 2:** Highly flammable liquid and vapour.  
**H229:** Pressurised container: May burst if heated.      **H319 Eye Irrit. 2:** Causes serious eye irritation.  
**H336 STOT SE 3:** May cause drowsiness or dizziness.

**Reason of revision, changes of following items:**

Sections: 2.1, 2.2

**MSDS reference number:**

ECM-100652,00

*This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 453/2010. Classification has been calculated in accordance with the European directive 67/548/EWG, 1999/45/EC and regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.*