

**Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006 (REACH)  
according to Regulation (EU) No 453/2010



Article no.: 100VR1322  
Date of print: 24.01.2013  
Version: 1.2

Revision date: 15.11.2012  
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifiers:**

Article no. (manufacturer / supplier): 100VR1322  
Identification of the substance or preparation:

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Relevant identified uses:**

Printing  
aids

**1.3. Details of the supplier of the safety data sheet**

**Supplier (manufacturer/importer/downstream user/distributor):**

A.M. Ramp & Co GmbH  
RUCO Druckfarben  
Lorsbacher Str. 28  
D-65817 Eppstein

Telephone: ++49.(0)6198-304.0  
Telefax: ++49.6198.32288

**Dept. responsible for information:**

E-mail: info@ruco-inks.com

**1.4. Emergency telephone number**

Emergency telephone: ++49.6198.304.0  
Only available during office hours.

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification according to EC regulation 1272/2008 (CLP):**

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Acute Tox. 4 / H312

Acute toxicity (dermal):

Harmful in contact with skin.

Acute Tox. 4 / H332

Acute toxicity (inhalative):

Harmful if inhaled.

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

The preparation is dangerous in the sense of Directive 1999/45/EC.

Xn; R20/21

Harmful

Harmful by inhalation and in contact with skin.

**2.2. Label elements**

**Labelling (CLP)**

**Hazard pictograms**



**Warning**

**Hazard statements:**

H312 + H332 Harmful in contact with skin or if inhaled.

**Safety precautions:**

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P271

Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352

IF ON SKIN: Wash with plenty of soap and water.

P304 + P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312

Call a POISON CENTER or doctor/physician if you feel unwell.

P363

Wash contaminated clothing before reuse.

P501

Dispose of contents/container to industrial incineration plant.

**contains:**

2-butoxyethyl acetate

**Supplemental Hazard information (EU):**

n.a.

**Labelling (67/548/EEC or 1999/45/EC)**

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Xn Harmful

**Hazard statements:**

20/21 Harmful by inhalation and in contact with skin.

**Safety precautions:**

36/37 Wear suitable protective clothing and gloves.

51 Use only in well-ventilated areas.

**contains:**

2-butoxyethyl acetate

**Special provisions concerning the labelling of certain mixtures**

n.a.

2.3. **Other hazards**

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

3.2. **Mixtures**

**chemical characterization (preparation)**

**Description:** Organic solvent or solvent mixture

**Hazardous ingredients:**

**Classification according to EC regulation 1272/2008 (CLP):**

EC No:	REACH No:	% by weight
CAS No.:	Chemical name:	Remark:
INDEX no.:	classification:	
203-933-3	01-2119475112-47-XXXX	50 - 100
112-07-2	2-butoxyethyl acetate	
607-038-00-2	Acute Tox. 4 H332 / Acute Tox. 4 H312	

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

EC No:	REACH No:	% by weight
CAS No.:	Identification of the hazard:	Remark:
INDEX no.:	classification:	
203-933-3	01-2119475112-47-XXXX	50 - 100
112-07-2	2-butoxyethyl acetate	
607-038-00-2	Xn; R20/21	

**Additional information**

Full text of R-phrases: see section 16.

Full text of H-phrases: see section 16.

**SECTION 4: First aid measures**

4.1. **Description of first aid measures:**

**General information:**

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in unconscious position and seek medical advice.

**After inhalation**

Move victim to fresh air. Put victim at rest and keep warm. In case of irregular breathing or respiratory arrest provide artificial respiration.

**In case of skin contact:**

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

**In case of eye contact:**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice.

**After ingestion:**

If swallowed, rinse mouth with water (only if the person is conscious). Consult physician immediately. Keep victim calm. Do not induce vomiting.

4.2. **Most important symptoms and effects, both acute and delayed:**

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In all cases of doubt, or when symptoms persist, seek medical advice.

**4.3. Indication of any immediate medical attention and special treatment needed**

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media:**

Alcohol resistant foam, Carbon dioxide, Powder, spray mist, (water)

**Extinguishing media which must not be used for safety reasons:**

Strong water jet

**5.2. Special hazards arising from the substance or mixture**

Inhaling hazardous decomposing products can cause serious health damage.

**5.3. Advice for firefighters**

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

**6.2. Environmental measures**

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

**6.3. Methods and material for containment and cleaning up**

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see chapter 13). Clean using cleansing agents. Do not use solvents.

**6.4. Reference to other sections**

Observe protective provisions (see chapter 7 and 8).

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advices on safe handling**

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. When using do not eat, drink or smoke. Personal protection equipment: refer to chapter 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

**Precautions against fire and explosion:**

Vapours are heavier than air and will spread at floor level. Vapours form explosive mixtures with air.

**7.2. Conditions for safe storage, including any incompatibilities**

**Requirements for storerooms and containers:**

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSIVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

**Hints on joint storage**

Keep away from strongly acidic and alkaline materials as well as oxidizers.

**Further information on storage conditions**

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 35 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

**7.3. Specific end use(s)**

Observe technical data sheet. Observe instructions for use.

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

EC No:	Description:	type:	Limit value		Unit
CAS No.:		Country:	STEL (EC)	TWA (EC)	
203-933-3	2-butoxyethyl acetate		333	133	mg/m <sup>3</sup>
112-07-2		EG	50	20	ppm

#### Additional information

TWA (EC): Occupational exposure limit value

STEL (EC): Short-term occupational exposure limit value

### 8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

#### Occupational exposure controls:

##### Respiratory protection:

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number.

##### Hand protection:

For prolonged or repeated handling the following glove material must be used: butyl rubber

Thickness of the glove material: > 0,4 mm ; Penetration time (maximum wearing period): > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles: DIN EN 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

##### Eye protection:

Wear closely fitting protective glasses in case of splashes.

##### Body protection:

Recommendation: Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

##### Protective measures:

After contact clean skin thoroughly with water and soap oder use appropriate cleanser.

##### Environmental exposure controls

Do not allow to enter into surface water or drains. refer to chapter 7. No further action is necessary.

## SECTION 9: Physical and chemical properties

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

#### Appearance:

Physical state:	liquid
Colour	as labeled
Odour:	typical

Safety relevant basis data	Unit	Method	Remark:
Flash point:	78 °C	DIN 53213	
Ignition temperature (AIT):	375 °C		
lower explosion limit:	1,7 Vol-%		
Upper explosion limit:	8,4 Vol-%		
Vapour pressure at 20 °C:	n.a.		
Density at 20 °C:	0,94 g/cm <sup>3</sup>		
Water solubility (g/l):	not soluble		
pH at 20 °C:	-		
Viscosity at 20 °C	11 s 4 mm	DIN 53211	
Solvent separation test (%):	< 3 %	ADR/RID	
Solid content (%):	0,00 % by weight		
solvent content:			
Organic solvents:	100 % by weight		
Water:	0 % by weight		

### 9.2. Other information:

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

### 10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

### 10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

### 10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

## SECTION 11: Toxicological information

No data on preparation itself available.

### 11.1. Information on toxicological effects

#### Acute toxicity

Toxicological data are not available.

#### Irritant and corrosive effects

Toxicological data are not available.

#### Sensitisation

Toxicological data are not available.

#### Specific target organ toxicity

Toxicological data are not available.

#### Aspiration hazard:

Toxicological data are not available.

#### Practical experience

Other observations:

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, dizziness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

#### Overall Assessment on CMR properties:

The components in this formulation do not meet the criteria for classification as CMR category 1 or 2.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified according to the toxicological dangers. See chapters 2 and 15 for details.

## SECTION 12: Ecological information

#### Overall evaluation:

There is no information available on the preparation itself.  
Do not allow to enter into surface water or drains.

### 12.1. Toxicity

Toxicological data are not available.

### 12.2. Persistence and degradability

Toxicological data are not available.

### 12.3. Bioaccumulative potential

Toxicological data are not available.

### 12.4. Mobility in soil

Toxicological data are not available.

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**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**

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Appropriate disposal / Product**

**Recommendation:**

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste.

**Control report for waste code/ waste marking according to EAKV:**

140603 other solvents and solvent mixtures

**Contaminated packaging:**

**Recommendation:**

Cleaned containers may be recycled. Vessels not properly emptied are special waste.

**SECTION 14: Transport information**

**No dangerous good in sense of these transport regulations.**

**14.1. UN-No.:**

n.a.

**14.2. UN proper shipping name**

**14.3. Transport hazard class(es)**

n.a.

**14.4. Packing Group:**

n.a.

**14.5. Environmental hazards:**

Land transport (ADR/RID)

n.a.

Marine pollutant:

n.a.

**14.6. Environmental hazards**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

**Further remarks:**

**Land transport (ADR/RID)**

Tunnel restriction code:

-

**Sea transport (IMDG)**

EmS-No.:

n.a.

**14.7. Special precautions for user**

not applicable

**SECTION 15: Regulatory information**

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

**EU legislation**

**Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).**

VOC-value (in g/l) ISO 11890-2: 940,000

VOC-value (in g/l) ASTM D 2369: 940,000

**National regulations**

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**Informations on working limitations:**

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.  
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

**15.2. Chemical Safety Assessment**

Chemical safety assessments for substances in this preparation were not carried out.

**SECTION 16: Other information**

**Relevant R-and H-phrases (Number and full text):**

Acute Tox. 4 / H332	Acute toxicity (inhalative):	Harmful if inhaled.
Acute Tox. 4 / H312	Acute toxicity (dermal):	Harmful in contact with skin.
Xn; R20/21	Harmful	Harmful by inhalation and in contact with skin.

**Further remarks:**

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

**Remarks:**

n.a. = not applicable