

Material Safety Data Sheet

According to 91/155 EC - ISO 11014-1

Printing date 02.07.2004

Reviewed on 02.07.2004

1 Identification of substance

- . **Product details**
- . **Trade name** Rubens Dryer
- . **Intended use:**
- . **Application of the substance / the preparation**
additive for Rubens artists' paints
- . **Manufacturer/Supplier:**
DAW Stiftung & Co. KG
GB Nerchau Mal- und Künstlerfarben
Wurzener Str. 38
D-04685 Nerchau
Tel. 034382/7040 Fax. 034382/704-16 oder -18
- . **Informing department:** development department: ++49 (0)34382-704-56
- . **Emergency information:** Tel.: ++49 (0)30 19240

2 Composition/Data on components:

- . **Chemical characterization**
- . **Description:**
Rubens Dryer contains siccativ products and solvents, to accelerate drying.
- . **Dangerous components:**

CAS: 8006-64-2	Turpentine, oil	>75 - 100%
EINECS: 232-350-7	Xn, N; R 10-20/21/22-36/38-43-51/53-65	
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	< 2,5%
	Xn; R 65-66	
	Cobaltcarboxylate	< 2,5%
	Xn; R 22-38-43	
- . **Additional information** See section 8.

3 Hazards identification

- . **Hazard designation:**
Xn Harmful
N Dangerous for the environment
- . **Information pertaining to particular dangers for man and environment**
The preparation contains organic solvents. The inhalation, skin contact and swallowing of solvents as well as the forming of easily inflammable and explosive concentrations in the air must be avoided.
R 10 Flammable.
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R 36/38 Irritating to eyes and skin.
R 43 May cause sensitisation by skin contact.
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4 First aid measures

- . **General information**
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- . **After inhalation**
Remove to fresh air, keep the patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If uncon-scious, place in the recovery position and seek medical advice.
- . **After skin contact**
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Do not use solvents or thinners.
- . **After eye contact**
Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

(Contd. on page 2)

Material Safety Data Sheet

According to 91/155 EC - ISO 11014-1

Printing date 02.07.2004

Reviewed on 02.07.2004

Trade name *Rubens Dryer*

(Contd. of page 1)

. **After swallowing**

If accidentally swallowed, obtain immediate medical attention. Keep at rest.
Do not induce vomiting.

5 Fire fighting measures. **Suitable extinguishing agents**

alcohol resistant foam, carbon dioxide, powders, water spray

. **For safety reasons unsuitable extinguishing agents** water jet. **Special hazards caused by the material, its products of combustion or flue gases:**

Fire will produce dense black smoke. Exposure to decomposition- products may cause a health hazard.

. **Protective equipment:**

Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water.

6 Accidental release measures. **Person-related safety precautions:**

Exclude sources of ignition and ventilate the area. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8.

. **Measures for environmental protection:**

Do not allow to enter drains or water courses. If the product con-taminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.

. **Measures for cleaning/collecting:**

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations. Clean preferably with a detergent; avoid the use of solvents.

7 Handling and storage. **Handling**. **Information for safe handling:**

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits. Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically. No sparking tools should be used. Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking should be prohibited in application area. For personal protection, see section 8. Comply with the health and safety at work laws.

. **Information about protection against explosions and fires:**

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

. **Storage**. **Requirements to be met by storerooms and containers:**

Electrical equipment should be protected to the appropriate standard. Floors should be conductive. Keep packaging tightly closed. No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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

Not to be stored together with oxidizing agents, strongly alkaline and strongly acid materials.

. **Further information about storage conditions:**

Always keep in container of same material as the original one. Store between 5°C and 20°C in a dry, well ventilated place away from sources of heat and direct sunlight. Keep away from sources of ignition.

(Contd. on page 3)

Material Safety Data Sheet

According to 91/155 EC - ISO 11014-1

Printing date 02.07.2004

Reviewed on 02.07.2004

Trade name **Rubens Dryer**

(Contd. of page 2)

8 Exposure controls and personal protection**. Additional information about design of technical systems:**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the relevant occupational exposure limits (OEL), suitable respiratory protection must be worn.

. Components with critical values that require monitoring at the workplace:**8006-64-2 Turpentine, oil**

MAK (Germany) 560 mg/m³, 100 ml/m³
H; DFG

64742-48-9 Naphtha (petroleum), hydrotreated heavy

TRGS (Germany) 200 ml/m³
Kohlenwasserstoff-Gemische Gruppe 1

. Additional information:

The lists that were valid during compilation form the basis.

. Personal protective equipment

. Breathing equipment: Applies only for spraying without sufficient ventilation.

. Protection of hands:

Gloves made of Nitril of at least 0,4 mm thickness to be used. Time of break through more than 480 minutes.

The gloves to be used have to comply with the specifications acc. EU Guidelines 89/686/EWG and the resulting DIN standard EN 374, e.g. KCL Camatril, article number 730 or comparable products.

The indicated times of break through are based on KCL laboratory measuring acc. to EN 374. They are standard for this KCL article only.

This recommendation refers only to the product delivered by us and the mentioned purpose.

If a repeated or prolonged contact with the product is inevitable, use protective creams for the skin.

. Eye protection:

Use safety eyewear designed to protect against splash of liquids.

9 Physical and chemical properties:**. General Information**

Form:	Fluid
Colour:	Colourless
Smell:	Solvent-like

. Change in condition

Boiling point/Boiling range: 154 -170°C

. Flash point: ca. 32°C (DIN 51213)

. Ignition temperature: 220°C

. Critical values for explosion:

Lower:	0,6 Vol %
Upper:	9,4 Vol %

. Steam pressure at 20°C: 5,35 mbar (Terpentinöl)

. Density at 20°C ca. 0,86 g/cm³

. Solubility in / Miscibility with

Water: Not miscible or difficult to mix

. pH-value: Not applicable

. Viscosity:

kinematic at 20°C: 4mm Becher < 25 s (DIN 53211/4)

(Contd. on page 4)

Material Safety Data Sheet

According to 91/155 EC - ISO 11014-1

Printing date 02.07.2004

Reviewed on 02.07.2004

Trade name *Rubens Dryer*

(Contd. of page 3)

10 Stability and reactivity

- . **Thermal decomposition / conditions to be avoided:**
Stable under recommended storage and handling conditions
(See section 7).
- . **Materials to be avoided:**
Keep away from oxidizing agents, strongly alkaline and acidic materials in order to avoid exothermic reaction.
- . **Dangerous products of composition:**
When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide and smoke.

11 Toxicological information

- Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system.
- Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
- Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
- Kann beim Verschlucken Lungenschäden verursachen.
- . **Acute toxicity:**
 - . **Sensitization:** Sensitization possible by skin contact.

12 Ecological information:

There are no data available on the preparation itself.
Do not allow into drains, water courses or soil.

13 Disposal considerations

- . **Product:**
To be returned to collection point for old paints.
May not be dumped with household waste. May not be emptied into drains.
- . **European waste catalogue**
07 02 04 other organic solvents, washing liquids and mother liquors
- . **Uncleaned packagings:**
- . **Recommendation:**
Only completely emptied containers may be recycled. Containers with remainders are to be returned to collection point for old paints.

14 Transport information

- . **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**
- . **ADR/RID-GGVS/E Class:** 3 Flammable liquids.
- . **Number/Letter:** 31c
- . **UN-Number:** 1263
- . **Label** 3
- . **Designation of goods:** paint related material (Turpentine)
- . **Maritime transport IMDG/GGVSea:**
- . **IMDG/GGVSea Class:** 3.3
- . **Page:** 3372
- . **UN Number:** 1263
- . **Packaging group:** III
- . **EMS Number:** F-E,S-E
- . **MFAG:** 313
- . **Correct technical name:** paint related material (turpentine)

(Contd. on page 5)

Material Safety Data Sheet

According to 91/155 EC - ISO 11014-1

Printing date 02.07.2004

Reviewed on 02.07.2004

Trade name **Rubens Dryer**

(Contd. of page 4)

- . Air transport ICAO-TI and IATA-DGR:
- . ICAO/IATA Class: 3
- . UN/ID Number: 1263
- . Packaging group: III

15 Regulatory information

- . **Designation according to EC guidelines:**
The product has been classified and labelled in accordance with EU Directives / Ordinance on Hazardous Materials (GefStoffV)
- . **Code letter and hazard designation of product:**
Xn Harmful
N Dangerous for the environment
- . **Hazard-determining components of labelling:**
Turpentine, oil
Cobaltcarboxylate
- . **Risk phrases:**
10 Flammable.
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
36/38 Irritating to eyes and skin.
43 May cause sensitisation by skin contact.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- . **Safety phrases:**
2 Keep out of the reach of children.
16 Keep away from sources of ignition - No smoking.
23 Do not breathe fumes/aerosol.
29 Do not empty into drains.
37 Wear suitable gloves.
51 Use only in well-ventilated areas.
62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
- . **National regulations**
- . **Technical instructions (air):**
- . **Class Share in %**

. II	0,1
. III	96,0
. NK	2,2
- . **Water hazard class:**
Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information:

The information of this MSDS is based on the present state of our knowledge and current EEC and national laws, as the user's working conditions are beyond our knowledge and control. The product is not to be used for other purposes other than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this MSDS is meant as a description of the safety requirements of our product: it is not to be considered as a guarantee of the products' properties. Substitutes data sheet from: 25.08.2000
Changes in section: 1-3, 8, 12, 15 und 16

- . **Relevant R-phrases**
10 Flammable.
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
22 Harmful if swallowed.
36/38 Irritating to eyes and skin.
38 Irritating to skin.

(Contd. on page 6)

Material Safety Data Sheet

According to 91/155 EC - ISO 11014-1

Printing date 02.07.2004

Reviewed on 02.07.2004

Trade name *Rubens Dryer*

(Contd. of page 5)

- | | |
|-------|---|
| 43 | May cause sensitisation by skin contact. |
| 51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 65 | Harmful: may cause lung damage if swallowed. |
| 66 | Repeated exposure may cause skin dryness or cracking. |

EU