

**Material Safety Data Sheet**

Revision date: 2.29.2012

Revision 5.0

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**1 Product and company Identification**

**1.1 Commercial product name**

**PANNIER REA-JET TWA-RT 010 Ink**

**1.2 Product number IJ050-9003-05**

**1.3 Emergency telephone:**

**Chemtrec 24-hour telephone #-800-424-9300**  
**International 24-hour telephone #-703-527-3667**

**2 Composition/Data on constituents**

**2.1 Chemical characterization:**

Mixture of water, polar organic solvents, dye and auxiliaries

**2.2 Hazardous ingredients:**

Substance identity	EC No.	CAS No.	Content %	Symbol	R phrases
Diethylene glycol	203-872-2	111-46-6	<11	Xn	22
1-Methoxy-Propanol-2	203-539-1	107-98-2	<22	none	10

**3 Hazardous Identification**

**Special hazard information with regard to health and environment:** None

**Possible noticeable symptoms on humans:**

**1-Methoxy-Propanol-2**

Irritating to respiratory system, eyes and skin. Risk of absorption through the skin. Swallowing can cause stomach trouble, indisposition, diarrhea and vomiting. Can cause dizziness, headache and perceptive trouble. Can cause depression of the central nervous system.

**Diethylene glycol:** Swallowing can cause stomach trouble, indisposition, diarrhea and vomiting. Can cause dizziness, headache and perceptive trouble. Can cause depression of the central nervous system

**4 First Aid Measures**

**General advice:** Take off immediately all contaminated clothing. If there is a risk that casualty is losing consciousness lay him and move him safely on his side.

**Inhalation:** Move casualty to fresh air. If there is respiratory distress, give oxygen and seek medical attention.

**Skin contact:** Wash area with soap and copious amounts of water.

**Eye contact:** If available, remove contact lenses. Rinse immediately with copious amounts of water (at least 15 minutes long)

**Ingestion:** Have the casualty take a rest. Seek immediately medical attention. Have the casualty drink some water (200ml)

Do not induce vomiting. NO MILK, NO CASTOR OIL The doctor will have to decide which measures are to be taken.

**5 Fire Fighting Measures**

The vapours of the solvents contained in the mixture are heavier than air and collect on the ground. Contact with the air may lead to explosive mixtures. The product is miscible with water.

**5.1 Extinguishing media:**

Convenient extinguishing media are: Alcohol-resistant foam, carbon dioxide, dry powder, water fog and water spray.

Do NOT use: Water jet

**5.2 Hazards due to gas formation and / or decomposition products:**

A fire can generate the following gases: Carbon oxide, nitrogen oxide and other by part irritating combustion vapours.

**5.3 Special protective equipment during firefighting:**

Wear self-contained breathing apparatus with pressure equipment as well complete protective clothing. Prevent water used for firefighting from entering sewers or ground water.

**6 Accidental Release Measures**

**Personal protection:**

Avoid sources of ignition. Do not smoke. Do not breathe in vapours/aerosol. Avoid contact with the eyes and the skin. Wear appropriate protective gloves (Latex, Vinyl, Nitrile are only resistant to a limited extent. Butyl rubber is resistant). Wear safety glasses/goggles. If no exhauster available, wear breathing filter (Class A brown).

**Environmental protection:**

Prevent vapours from developing by covering with damp cloth. Do not allow to enter sewers, basement or ground water. In case of emergency stem by using appropriate measures. Keep away from sources of ignition. Do not smoke.

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**After spillage/leakage:**

Absorb spills with non-combustible, liquid-binding material (such as sand, silica gel, multi-purpose binding agent, Oil-Dry®, Dresser-Dri®). Clean with water. Dispose of product and of all cloth and cleaning agents contaminated by the product according to regulations mentioned in Section 13.

**Further information:**

Product is flammable and miscible with water.

n.a. = Not applicable

n.d.a. = No data available

**7 Handling and Storage**

**7.1 Handling:**

Usual precautionary measures when handling chemicals are to be taken.

Wear appropriate gloves and eye protection. Open and handle container with care.

Air thoroughly and if necessary care for exhauster or breathing filter (Class A brown).

Do not smoke, eat or drink at work. Take measures against static discharges.

Preventive skin protection is recommended.

Wash hands with soap and copious amounts of water at the end of work.

**7.2 Storage conditions:**

Store product in a cool, approved area and keep it in its original container, tightly closed.

Air thoroughly. Keep away from sources of ignition and from fire-activating materials.

Protect against strong heating and sunshine. Recommended storage temperature: +15°C-25°C

**Keep away from frost!**

**8. Occupational exposure limits and personal protection**

**Limits:**

**8.1 Constituents, the values of which are to be watched at work:**

**MAC values TRGS 900 (Maximum Admissible Concentration Germany)**

CAS Nr.:	Rule:	Value:	Unit:	Value:	Unit:
111-46-6	MAC	10	ml/m <sup>3</sup>	44	mg/m <sup>3</sup>
107-98-2	MAC	100	ml/m <sup>3</sup>	370	mg/m <sup>3</sup>

**BAT values TRGS 903 (Biological Workplace Tolerance Limit Germany)**

CAS Nr.:	BAT value:	Parameter:	Test material:
111-46-6	none	none	none
107-98-2	none	none	none

**8.2 Personal protective equipment:**

Protective means must be selected according to work-specific conditions and to the concentration of hazardous ingredients. The resistance of the protective means to chemicals should be evaluated with the respective supplier.

**Respiratory protection:**

If no exhauster available, wear breathing filter Class A (brown) Organic vapours

**Protective gloves:**

Wear impermeable protective gloves (Butyl rubber). Latex gloves are only resistant to a limited extent.

Preventive skin protection.

**Eye protection:**

Wear safety glasses/goggles with side shields.

**Protective clothing:**

Wear long-sleeved, antistatic, hardly inflammable working clothes.

**Hygiene measures:**

Keep away from food, drink and animal feeding stuffs. Wash hands when making a break and at the end of work. Do not eat, drink or smoke at work.

**Never clean skin or clothes with solvents!**

**9 Physical and chemical properties**

<b>Form:</b>	liquid
<b>Colour:</b>	red
<b>Odour:</b>	characteristic
<b>Boiling point:</b>	79 °C - 110 °C
<b>Melting point</b>	n.d.a.

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<b>Flash point:</b>	> 55 °C
<b>Auto ignition point:</b>	287 °C Literature value for 1-Methoxy-Propanol-2
<b>Explosive limits:</b>	lower: 1.48 % upper: 13.74 % Literature value for 1-Methoxy-Propanol-2
<b>Vapour pressure:</b>	0,053 mbar / 20 °C Literature value for 1-Methoxy-Propanol-2
<b>Vapour density:</b>	> 1 (air = 1)
<b>pH value:</b>	7 - 8
<b>Density:</b>	1 - 1.02 g/ml
<b>Bulk density:</b>	not applicable due to liquid physical condition
<b>Viscosity:</b>	2.7 - 2.9 mm <sup>2</sup> /s
<b>Solubility in water:</b>	Miscible
<b>Miscible in:</b>	n.d.a.
<b>Solvent content:</b>	< 35 %

### 10 Stability and reactivity

**Stability:** The product is stable.

**Conditions to avoid:** Strong heat (> 45°C) and/or sunshine

**Substances to avoid:** Strong acids and alkaline solutions, oxidizing and reducing substances

**Hazardous reactions:** With acids, alkaline solutions, oxidizing and reducing substances.

**Hazardous decomposition:** Carbon oxide, nitrogen oxide

### 11. Toxicological information

Diethylene 1-Methoxy- Unit

**Acute toxicity:** glycol Propanol-2

**LD50:** Acute/oral/rat: 12565 3700-6600 mg/kg

**LD50:** Acute/dermal/rabbit: 11890 13000 mg/kg

**LC50:** Inhalation/rat: n.d.a. 37500 mg/Litre/4h

Repeated or prolonged contact with the skin may cause skin eruptions and dermatitis. Critical amounts can be taken up due to absorption through the skin. Inhalation causes headache, daze, drowsiness and perceptive trouble. Eye contact can cause strong irritation and oedema of the cornea. Can cause liver, kidney and central nervous system injuries. If breathed in when swallowed or vomited out, may cause severe lung injuries.

n.a. = Not applicable

n.d.a. = No data available

### 12. Ecological information

Water pollution hazards Class 1 (Germany)

Toxicity	Diethylene glycol	1-Methoxy-Propanol-2
Fish toxicity: (Leuciscusidus)	n.d.a.	LC50 : 20800 mg / Litre
Bacteria toxicity: (Ps.Putida)	EC0 : 8000 mg / Litre after 16h	n.d.a.
Aquatic organisms	. n.d.a.	n.d.a
Daphnia toxicity:(Daphnia magna)	EC50 : 10000 mg / Litre after 24h	EC50 : 23300 mg / Litre

Do not allow to enter sewers or waterways.

No environmental problems are to be expected if the product is handled under normal conditions of anticipated use.

### 13 Disposal information

Consult local authorities for approved method of disposal.

**European waste code:** 070604

**Uncleaned packings:** Waste disposal as per local regulations.

### 14 Transport regulations

**14.1 Road transport: ADR/RID and GGVS/GGVE:**

No dangerous goods according to ADR/RID and GGVS/GGVE

**14.2 Sea transport: IMDG/GGVSee:**

No dangerous goods according to IMDG/GGVSee

**14.3 Air transport: ICAO-TI and IATA-DGR:**

No dangerous goods according to ICAO-TI and IATA-DGR The transport regulations are cited according to international regulations and in the form applicable in Germany (GGVS/GGVE). Possible national deviations in other countries are not considered.

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**15. Regulations**

**Labelling according to EC guideline 1999/45/EEC and to TRGS200:**

The product is classified and labelled according to EC guidelines.

**Warning symbol:** None

**R phrases:** None

**S phrases:** None

Recommendation: S 24/25 Avoid contact with the eyes and the skin

**Special labelling for particular preparations:**

None

**German regulations:**

Water pollutant class: 1 "Slightly hazardous in the aquatic environment"

Regulation concerning flammable liquids: n.a.

Storage class VCI: n.a.

Local regulations on chemical accidents: 26, 2, 7b

**Other national regulations:** n.d.a.

**16 Other information**

The data given here are based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data do not signify any warranty with regard to the properties of the product.

**To be used only for industrial purposes of application!**

**Disclaimer of Liability**

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