

Material Safety Data Sheet

Revision date: 12.16.2008

Revision 6.02

REA-JET AAW 0214 Ink

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1. Product and company Identification

1.1 Commercial product name

REA-JET AAW 0214 Ink

Product number

IJ050-9003-31

1.2 Chemical Characterization Preparation of polar organic solvents, water, dyes, binders and auxiliary materials.

1.3 Emergency telephone:

Chemtrec 24-hour telephone # 800-424-9300
International 24-hour telephone # 703-527-3887

2. Hazards Identification

Routes of Entry: None

Signs and Symptoms of Exposure

Carcinogenicity (NTP):	None
Carcinogenicity (IARC):	None
Carcinogenicity (OSHA):	None

2.2 Special hazards for human health and environment

Water risk class: 1 Mild water pollutant.

3. Composition/Information on Ingredients

3.2 Hazardous components

Components	CAS No.	Quantity
Ammonia ...%	1336-21-6	1-5%
Isopropanol, isopropyl alcohol, propan-2-ol	67-63-0	1-5%

4. First Aid Measures

General Information: In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible). Take off immediately all contaminated clothing if victim is at risk of losing consciousness, position and transport on their side. The decision about the measures, which have to be initiated, has to be taken by the doctor.

4.1 After inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest. Consult physician

4.2 After contact with skin: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.

4.3 After contact with eyes: Take off lenses. Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult physician.

4.4 After ingestion: Calm the victim. Rinse mouth thoroughly with water. Immediately get medical attention. Let water be swallowed in little sips (dilution effect). Do not induce vomiting. Milk or fat oils and are strongly contraindicated. Do not allow a neutralization agent to be drunk.

5. Fire Fighting Measures

5.1 Suitable extinguishing media: alcohol resistant foam. Carbon dioxide (CO₂). Dry extinguishing powder. Water spray. Atomized water.

5.2 Unsuitable extinguishing media: High power water jet

5.3 Special hazards arising from the chemical: In case of fire may form: Carbon monoxide. Nitrogen oxides (NO_x). Vapors may form explosive mixtures with air.

5.4 Protective equipment and precautions for firefighters: Wear a self-contained breathing apparatus and chemical resistant suit.

5.5 Additional information: Temperature class T 1 (Ignition temperature: >450 °C)

6. Accidental Release Measures

6.1 Personal precautions: Provide fresh air. Avoid contact with skin and eyes. Wear suitable gloves. NR (Natural rubber (Caoutchouc), Natural latex). NBR (Nitrile rubber) limited resistance, Butyl rubber. In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves. Wear eye/face protection. If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. See protective measures under point 7 and 8.

6.2 Environmental precautions: Do not empty into drains or the aquatic environment.

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6.3 Methods for cleaning up/taking up: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated objects and areas thoroughly observing environmental regulations. Treat the assimilated material according to the section on waste disposal. (13)

7. Handling and Storage

7.1 Advice on safe handling: When handling with chemicals, please consider usual precautionary measures. Wear suitable protective clothing, gloves and eye/face protection. See protective measures under point 7 and 8. Do not leave the container open. Handle open container with care. Keep container tightly closed. If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn. When using do not eat, drink or smoke. Protect skin by using skin protective cream. "Wash hands when done working with material; at breaks, lunch, shift changes, etc." Keep away from food, drink and animal feeding stuffs. Never clean the skin or the clothes with the preparation!

7.2 Advice on protection against fire and explosion: The vapors are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars. Vapors may form explosive mixtures with air. Take precautionary measures against static discharges. Keep away from sources of ignition. No smoking.

7.3 Further information on handling: Vapors / aerosols should be extracted by suction directly at point of origin. See information supplied by the manufacturer. For limiting the emission through volatile organic compounds (VOC), the solvent vapors should be forwarded to an emission control facility. Please note the manufacturer indications for storage conditions and shelf life (see section 7.3) When storing outside the recommended storing temperatures, the shelf life can be shortened. Inappropriate storage may conduct to endangerment of persons and environment.

7.4 Requirements for storage rooms and vessels: Keep only in the original container in a cool, well ventilated place. Keep container tightly closed. Rooms, in which inks are stocked, have to be equipped with sufficient air ventilation. Remove all sources of ignition. Protect against high warming or solar radiation. Recommended storage temperature: +15 °C - 25 °C. Maximum period of storage (time): 6 months

8. Exposure Controls/Personal Protection:

8.1 Exposure limit values:

Exposure Limits

Components	CAS No.	ml/m ³	mg/m ³	Category	Origin
Isopropyl alcohol	67-63-0	400	980	TWA (8hr)	PEL
		400	980	TWA (8hr)	REL
		500	1225	STEL (15 min)	REL

Exposure controls: None

Occupational exposure controls: Technical measures and the application of appropriate methods of operation, as indicated in section 7, have precedence over to the application of personal protection equipment.

8.2 Protective and hygiene measures: Protect skin by using skin protective cream. "Wash hands when done working with material; at breaks, lunch, shift changes, etc."

8.3 Respiratory protection: If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn.

8.4 Hand protection: Type of chemical protective gloves to choose depends on the concentration and quantity of dangerous substances as well as on work place specifications. In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

8.5 Eye protection: Tightly sealed safety glasses.

8.6 Skin protection: Carry long-sleeved, flame impeding and anti-static labor safety clothing

8.7 Environmental exposure controls: Please see chapter 6 and 7

8.8 Additional advice on control parameters: None

9. Physical and Chemical Properties

9.1 Appearance

Form:	liquid
Color:	blue
Odor	like ammoniac

9.2 Important health, safety and environmental information

pH-Value (at 20 °C):	9.9	DIN 19268
Melting point:	not determined	DIN 53181
Boiling point:	79 – 110°C	DIN 51751
Flash point:	>55°C	DIN51765
Explosive properties	not explosive	
Lower explosion limits:	not determined	DIN51649
Upper explosion limits:	not determined	DIN51649
Oxidizing properties	not determined	

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Vapor pressure (at 20°C)	not determined
Density (at 20°C)	1.04 g/cm ³
Water solubility (at 20°C)	250 g/L
Partition coefficient	not determined
Viscosity/dynamic (at 20°C)	2.8 mPas
Viscosity/Kinematic (at 20°C)	not determined
Vapor density: (at 20°C)	>1
Evaporation rate (at 20°C)	not determined
Solvent separation test	not determined

DIN51754

DIN53217

DIN 53018

9.3 Other information

Ignition temperature:	>450°C
VOC	1.375% (14.3 g/l)
Maximum period of storage (time):	6 months

DIN51794

10 Stability and Reactivity

10.1 Stability: Stable

10.2 Conditions to avoid: High warming > 45°C and / or solar radiation. Heating up forwards the transit of liquid to the vapor phase and the accumulation of potentially explosive atmosphere.

10.3 Materials to avoid: Keep away from strong acids, leachates, heavy metal salts and reducing materials

10.4 Hazardous decomposition products: Keep away from strong acids, leachates, heavy metal salts and reducing materials.

10.5 Possibility of Hazardous Reactions: None

10.6 Additional information: This product is stable

11. Toxicological Information

Acute toxicity For this product there are currently no toxicological data available

Specific effects in experiment on an animal: For this product there are currently no toxicological data available.

Corrosive and irritant effects For this product there are currently no toxicological data available.

Sensitizing effects For this product there are currently no toxicological data available.

Severe effects after repeated or prolonged exposure For this product there are currently no toxicological data available.

Carcinogenic/mutagenic/toxic effects for reproduction For this product there are currently no toxicological data available.

Additional information on tests For this product there are currently no toxicological data available.

Empirical data on effects on humans For this product there are currently no toxicological data available

Further information Prolonged/repetitive skin contact may cause skin defatting or dermatitis. Highly fat solubilising effect. Danger of cutaneous absorption. Inhalation may cause headache, drowsiness, somnolence and perception disorder. Eye contact may cause heavy irritation and oedema formation of the conjunctiva. May cause damage on liver, kidneys and nervous system. Aspiration after swallowing and vomiting may conduct to heavy lung damages.

12 Ecological Information

12.1 Ecotoxicity For this product there are currently no ecotoxicological data available.

12.2 Mobility: In grounds: a moderate to high mobility of the solvents used in the preparation can be expected.

12.3 Persistence and degradability: Not determined

12.4 Bioaccumulative potential: No indication of bio-accumulation potential

12.5 Other adverse effects: Water risk class: 1 Mild water pollutant

12.6 Further information: Eco-toxicological data have not been identified especially for this preparation. The indicated information is based on the current state of knowledge of the used materials and of similar products. It should not reach the canalization, the ground or the waters. With an appropriate handling and application any ecological problems are not to be expected. RoHS-conformity: The preparation is in conformity with the 2002/95/EG RoHS and WEEE-guidelines

13 Disposal Considerations:

13.2 Contaminated packaging: Waste disposal according to official state regulations.

14 Transport Information

14.1 DOT Classification: UN number 0000

Description of the goods Not a hazardous material with respect to transportation regulations

Land transport (ADR/RID)

UN number 0000

Description of the goods Not a hazardous material with respect to transportation regulations.

Inland waterways transport

UN number 0000

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Description of the goods

Not a hazardous material with respect to transportation regulations

Marine transport

UN number

0000

Description of the goods

Not a hazardous material with respect to transportation regulations

Air transport

UN number

0000

Description of the goods

Not a hazardous material with respect to transportation regulations

15 Regulatory Information

U.S. Regulations:

SARA Section 313 Toxic Release Chemicals

Isopropyl alcohol (mfg-strong acid process)(CAS 67-63-0)

Additional information DO NOT USE THIS PRODUCT FOR CLEANING SKIN AND CLOTHES!

16 Other Information

Hazardous Materials Information Label (HMIS)

Health:

1

Flammability:

0

Physical Hazard:

0

NFPA Hazard Ratings

Health:

1

Flammability:

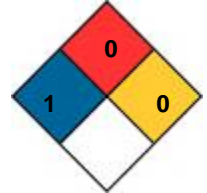
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Reactivity

0

Unique Hazard:

Not Applicable



Only for industrial application - not for private use

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