according to 29 CFR 1910.1200(g)

USA - EN Revision date: 30.04.2015 Revision No: 9,00,1

1. Identification

Product number TPWA-GB 010

Ink - YELLOW

Details of the supplier of the safety data sheet

PANNIER CORPORATION Company name:

Street: 207 Sandusky Street

Place: Pittsburgh, PA 15212-5823 USA

Telephone: (412) 323-4900 e-mail: sales@pannier.com Internet: www.pannier.com

Emergency phone number: INFOTRAC: 24-hour telephone number: 1-800-535-5053

Further Information

Toxicological information center (Mainz / Germany)

You should contact a doctor or a toxicological information centre if you suspect poisoning. The toxicological information centre provides free medical advice in the event of poisoning or a suspicion of poisoning to everyone around the clock.

Important questions for EMERGENCY:

- Who: age, weight, sex of the person concerned, telephone number .: for recall.
- What: All you can say about the involved agents.
- How much: Try to estimate the maximum possible intake.
- When: Try to get the time elapsed since the incident time estimate.
- What else: First observed symptoms? First Measures taken?

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2. Hazard(s) identification

Classification of the chemical

Hazard categories:

Flammable liquid: Flam. Liq. 4 Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2A Respiratory/skin sensitization: Skin Sens. 1

Hazard Statements: Combustible liquid Causes skin irritation

May cause an allergic skin reaction Causes serious eye irritation

Label elements

Signal word:

Warning

Pictograms:

exclamation mark



Hazard statements

Combustible liquid
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation

Precautionary statements

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

Hazards not otherwise classified

In principle all chemicals are particularly dangerous. Therefore they are to be handled only by specially trained personnel with the necessary care. The disposal of this product requires the expertise resp. an annual instruction according to ChemVerbotsV.

3. Composition/information on ingredients

Mixtures

Chemical characterization

Mixture of water, coloring agents, binders and additives.

Hazardous components

| CAS No | Components | Quantity |
|------------|--|----------|
| 1336-21-6 | Ammonium hydroxide solution 25% | 1 - 5 % |
| 25254-50-6 | Alpha,alpha,alpha-Trimethyl-1,3,5-triazin-1,3,5(2H,4H,6H)-triethanol | |

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4. First-aid measures

Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated, saturated clothing immediately. If victim is at risk of losing consciousness, position and transport on their side.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Seek medical attention if problems persist.

After contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. Repeated exposure may cause skin dryness or cracking. Use protective skin cream before handling the product. In case of skin irritation, consult a physician.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Keep at rest. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Aspiration hazard. Do not give fatty oils and milk. Do not allow a neutralisation agent to be drunk. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

SECTION 2: Hazards identification & SECTION 11: Toxicological information

Indication of any immediate medical attention and special treatment needed

There are no data available on the mixture itself.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings. In case of fire, use sand, extinguishing powder or alcohol resistant foam. Water fog. Atomized water.

Unsuitable extinguishing media

High power water jet.

Specific hazards arising from the chemical

Carbon monoxide. CO Carbon dioxide (CO2).

Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical resistant suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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Provide fresh air. Avoid contact with skin and eyes. Wear suitable protective clothing and eye/face protection.

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up

Provide adequate ventilation. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated objects and areas thoroughly observing environmental regulations. Collect in closed and suitable containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations. See information supplied by the manufacturer. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Open and handle container with care. Keep container tightly closed.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep only in the original container in a cool, well-ventilated place. Store small packages in a suitable, robust cabinet. Keep container tightly closed. Recommended storage temperature: (+15 °C) - (+25 °C)

Advice on storage compatibility

Do not store together with: Oxidising agent. Technical Rule 510 note.

Further information on storage conditions

Protect against direct sunlight. The product is chemically stable under recommended conditions of storage, use and temperature. In case of exceeding the storage time: Product/Packaging disposal. Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

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8. Exposure controls/personal protection

Control parameters

Additional advice on limit values

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Exposure controls

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Protective and hygiene measures

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin and eyes. Protect skin by using skin protective cream. Draw up and observe skin protection programme. Wash hands before breaks and after work. When using do not eat, drink or smoke.

Eye/face protection

Tightly sealed safety glasses. DIN EN 166

Hand protection

Wear protective gloves. Recommended material: Butyl caoutchouc (butyl rubber) Thickness of the glove material >= 0,5 mm. DIN EN 374. NR (natural rubber, natural latex) limited resistance using a maximum of 10 minutes. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Extended inhalation at levels above the workplace limit value can cause irreversible damage to the lungs. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

9. Physical and chemical properties

Information on basic physical and chemical properties

| Physical state: | liquid | |
|--|---------------------|-------------|
| Color: | yellow | |
| Odor: | like: Solvent | |
| | | Test method |
| pH-Value (at 20 °C): | not determined | DIN 19268 |
| Changes in the physical state | | |
| Initial boiling point and boiling range: | 100 - 110 °C | DIN 51751 |
| Flash point: | 97 °C | DIN 51755 |
| Explosive properties | | |
| not Explosive. | | |
| Lower explosion limits: | | DIN 51649 |
| Upper explosion limits: | | DIN 51649 |
| Ignition temperature: | | DIN 51794 |
| Vapor pressure: (at 20 °C) | 23 hPa | DIN 51754 |
| Density (at 20 °C): | 1,038 - 1,043 g/cm³ | ISO 2811 |
| Solubility in other solvents | | |
| mixable with most organic solvent cleaners | | |
| Viscosity / dynamic: (at 20 °C) | 2,5 - 2,8 mPa·s | DIN 53019 |
| Vapour density: | > 1 | |

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10. Stability and reactivity

Chemical stability

Stability: Stable

The mixture is chemically stable under recommended conditions of storage, use and temperature.

Possibility of hazardous reactions

Vapours of flammable solvents can accumulate in the gas phase of closed container, especially during heat treatment. Therefore keep away from fire and sources of ignition.

Conditions to avoid

Protect from sunlight. Store at temperatures not exceeding 35°C/95°F.

Incompatible materials

Keep away from strong acids, leachates, heavy metal salts and reducing materials.

Hazardous decomposition products

Carbon monoxide.(CO), Carbon dioxide (CO2). Peroxide

11. Toxicological information

Information on toxicological effects

Acute toxicity

| CAS No | Components | | | | | |
|------------|--|--------|-----------|---------|--------|--|
| | Exposure routes | Method | Dose | Species | Source | |
| 1336-21-6 | Ammonium hydroxide solution 25% | | | | | |
| | oral | LD50 | 350 mg/kg | Ratte | | |
| | inhalative (4 h) vapour | LC50 | 1,4 mg/l | Ratte | | |
| 25254-50-6 | Alpha,alpha,alpha-Trimethyl-1,3,5-triazin-1,3,5(2H,4H,6H)-triethanol | | | | | |
| | oral | ATE | 500 mg/kg | | | |
| | inhalative vapour | ATE | 11 mg/l | | | |
| | inhalative aerosol | ATE | 1,5 mg/l | | | |

Carcinogenicity (NTP): none
Carcinogenicity (IARC): none
Carcinogenicity (OSHA): none

Further information

Prolonged/repetitive skin contact may cause skin defattening or dermatitis. Danger of cutaneous absorption. Inhalation causes narcotic effects/intoxication. Causes eye irritation.N case of eye contact. May cause damage to liver through prolonged or repeated exposure if inhaled. Ingestion causes nausea, weakness and central nervous system effects. Observe risk of aspiration if vomiting occurs.

12. Ecological information

Persistence and degradability

Product is partially biodegradable. Significant residues remain.

Bioaccumulative potential

No data available

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Mobility in soil

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No data available

Other adverse effects

No data available

Further information

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see chapter 3).

13. Disposal considerations

Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation. Do not empty into drains; dispose of this material and its container in a safe way. Consult the appropriate local waste disposal expert about waste disposal. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

14. Transport information

US DOT 49 CFR 172.101

Proper shipping name:

Not a hazardous material with respect to these transport regulations. && Not controlled under DOT

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Marine transport (IMDG)

Other applicable information

No dangerous good in sense of this transport regulation.

Air transport (ICAO)

Other applicable information

No dangerous good in sense of this transport regulation.

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 304 CERCLA:

Ammonium hydroxide (1336-21-6): Reportable quantity = 1,000 (454) lbs. (kg)

SARA Section 311/312 Hazards:

Ammonium hydroxide (1336-21-6): Immediate (acute) health hazard

Alpha,alpha,alpha-Trimethyl-1,3,5-triazin-1,3,5(2H,4H,6H)-triethanol (25254-50-6): Immediate (acute) health hazard

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SARA Section 313 Toxic release inventory:

Ammonium hydroxide (1336-21-6): De minimis limit = 1.0 %, Reportable threshold = Standard

SARA

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Additional information

For use in industrial installations or professional treatment only.

16. Other information

| Hazardous Materials Information Health: | 1 | |
|---|----------------|------------|
| Flammability: | 1 | |
| Physical Hazard: | 0 | |
| Personal Protection: | В | |
| NFPA Hazard Ratings | | |
| Health: | 1 | |
| Flammability: | 1 | |
| Reactivity: | 0 | 1 0 |
| Unique Hazard: | not applicable | applicable |
| Revision date: | 30.04.2015 | · |
| Revision No: | 9,00,1 | |

Abbreviations and acronyms

Drop-on-Demand Printer Drop-on-Demand Printer

Other data

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The receiver of our product is singulary responsible for adhering to existing laws and regulations.

The product should only be handled by persons over the age of 18, who were informed sufficiently about the dangerous nature or the product and about the necessary safety precautions.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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