Safety data sheet
according to 1907/2006/EC, Article 31

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
- Product Code: TEB0104 - Yellow
- Product Name: Teachables Permanent Marker Bullet Assorted PK12
- Article number: 10000001356
- Registration number
The ingredients of this ink have been pre-registered according to 1907/2006/EC (REACH)
1.2 Relevant identified uses of the substance or mixture and uses advised against
Currently no such applications are identified
1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Modern Teaching Aids
Level 1, 122–126 Old Pittwater Rd, Brookvale, NSW
PO Box 6367, Frenchs Forest, NSW 2086, Australia
Phone: 1800 251 497
Fax: 1800 151 492
Web: teaching.com.au

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
- GHS02 flame
Flam. Liq. 2 H225 Highly flammable liquid and vapour.
- GHS07
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
- Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Signal word Danger

Hazard-determining components of labelling:
C. I. Solvent Yellow 146

Hazard statements
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P303+P361+P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

(Contd. on page 2)
SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Mixture of the following substances, containing non-hazardous substances and colouring agents.

- Dangerous components:
  - CAS: 64-17-5  EINECS: 200-578-6  Ethanol  Flam. Liq. 2, H225; Eye Irrit. 2, H319  50-100%
  - CAS: 94279-65-9  EC number: 304-811-3  C. I. Solvent Yellow 146  Aquatic Chronic 2, H411; Eye Irrit. 2, H319; Skin Sens. 1, H317  2,5-10%
  - Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
- After inhalation:
  Supply fresh air and to be sure call for a doctor.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
  Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing:
  If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
- Suitable extinguishing agents:
  CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
- Protective equipment:
  No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Wear protective equipment. Keep unprotected persons away.
- Wear protective clothing.

6.2 Environmental precautions:
- Prevent seepage into sewage system, workpits and cellars.
- Inform respective authorities in case of seepage into water course or sewage system.
- Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Ensure adequate ventilation.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
40.2.6 Information about fire - and explosion protection:
- Keep ignition sources away - Do not smoke.
- Protect from heat.
- Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: Store in a cool location.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions:
    - Keep container tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.
    - Protect from heat and direct sunlight.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Substance</th>
<th>Short-term value</th>
<th>Long-term value</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-98-2</td>
<td>1-Methoxy-2-propanol</td>
<td>568 mg/m³, 150 ppm</td>
<td>375 mg/m³, 100 ppm</td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

Respiratory protection:
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

General Information

Appearance:
- Form: Fluid
- Colour: According to product specification
- Odour: Product specific

(Contd. on page 4)
40.2.6 · Odour threshold: Not determined.

· Important information on protection of health and environment, and on safety.

· pH-value: Not determined.

· Change in condition
  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: 78 °C

· Flash point: 13 °C

· Flammability (solid, gaseous): Not applicable.

· Ignition temperature: 287 °C

· Decomposition temperature: Not determined.

· Self-igniting: Product is not self-igniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits:
  Lower: 1,7 Vol %
  Upper: 15,0 Vol %

· Vapour pressure at 20 °C: 59 hPa

· Density at 20 °C:
  Relative density Not determined.
  Vapour density Not determined.
  Evaporation rate Not determined.

· Solubility in / Miscibility with water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:
  Dynamic at 20 °C: 4,2 mPas
  Kinematic: Not determined.

· Solvent content:
  Organic solvents: 83,6 %

· Solids content: 16,2 %

· 9.2 Other information
  No further relevant information available.

**SECTION 10: Stability and reactivity**

· 10.1 Reactivity
· 10.2 Chemical stability
  Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
· 10.3 Possibility of hazardous reactions No dangerous reactions known.
· 10.4 Conditions to avoid No further relevant information available.
· 10.5 Incompatible materials: No further relevant information available.
· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

**SECTION 11: Toxicological information**

· 11.1 Information on toxicological effects
· Acute toxicity:
  · Primary irritant effect:
    · on the skin: No irritant effect.
    · on the eye: Irritating effect.
  · Sensitisation: Sensitisation possible through skin contact.
· Additional toxicological information:
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  Irritant
SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity:
    - 94279-65-9 C. I. Solvent Yellow 146
      - Oral LC50 / 48h: 2,000-5,000 mg/l (rat)

- 12.2 Persistence and degradability
  - No further relevant information available.

- 12.3 Bioaccumulative potential
  - No further relevant information available.

- 12.4 Mobility in soil
  - No further relevant information available.

- Ecotoxicological effects:
  - Remark: Harmful to fish

- Additional ecological information:
  - General notes:
    - Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
    - Do not allow product to reach ground water, water course or sewage system.
    - Harmful to aquatic organisms

- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

- 12.6 Other adverse effects
  - No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
    - Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- European waste catalogue
  - 08 00 00 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
  - 08 01 00 wastes from MFSU and removal of paint and varnish
  - 08 01 13 sludges from paint or varnish containing organic solvents or other dangerous substances

- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

- Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, IMDG, IATA: UN1263

- 14.2 UN proper shipping name
  - ADR: 1263 PAINT
  - IMDG, IATA: PAINT

- 14.3 Transport hazard class(es)
  - ADR
    - Class: 3 (F1) Flammable liquids.
    - Label: 3

  - IMDG, IATA
    - Class: 3 Flammable liquids.
    - Label: 3

- 14.4 Packing group
  - ADR, IMDG, IATA: II

- 14.5 Environmental hazards:
  - Marine pollutant: No

- 14.6 Special precautions for user
  - Warning: Flammable liquids.
  - Danger code (Kemler): 33
EMS Number: F-E, S-E

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

Transport/Additional information:
- ADR
- Limited quantities (LQ) 5L
- Excepted quantities (EQ) Code: E2
  Maximum net quantity per inner packaging: 30 ml
  Maximum net quantity per outer packaging: 500 ml
- Transport category 2
- Tunnel restriction code D/E
- IMDG
- Limited quantities (LQ) 5L
- Excepted quantities (EQ) Code: E2
  Maximum net quantity per inner packaging: 30 ml
  Maximum net quantity per outer packaging: 500 ml
- UN "Model Regulation": UN1263, PAINT, 3, II

SECTION 15: Regulatory information

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

- National regulations:
  - Technical instructions (air):
    | Class | Share in % |
    |-------|------------|
    | NK    | 50-100     |

- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.