

According to Commission Regulation (EU) No 453/2010

Printing date 26.03.2012 Version number 1

Revision date 26.03.2012

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

- · 1.1 Product identifier
- · Product name: Ballpen inks Black
- · Registration number: No registration number is given yet for this product.
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Used to ballpen inks.

Use advised against: No information available.

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Quantum International

102793 invo 4 Colour Grip Ballpen

908323 5 Star Premier Grip Ballpen Black

918508 5 Star Premier Soft Ballpoint Black

930368 5 Star Rtr Grip Ball Pen Med Black

102796 invo Desk Pen Black

112340 Invo Desk Pen Refills Pk20

2 SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008 [CLP]

Eye Irrit. 2 H319 Causes serious eye irritation.

· Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]

Xn; R20/22

Xi; R36

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 [CLP]

The product is classified and labelled according to the CLP regulation.

· Hazard pictogram(s):



GHS07

- · Signal word: Warning
- · Hazard statement(s):

H319 Causes serious eye irritation.

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· Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

- · 2.3 Other hazards No information available.
- · Results of PBT and vPvB assessment:
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterization: Mixtures

· Description:

Product: consisting of the following components.

| Ingredient name | CAS No. | EC No. | Concentration (%) | |
|-----------------------|------------|-----------|-------------------|--|
| Solvent black46 | 65113-55-5 | 265-449-9 | | |
| Benzyl alcohol | 100-51-6 | 202-859-9 | 25 | |
| 2-Phenoxyethanol | 122-99-6 | 204-589-7 | 20 | |
| Epoxy resin | 24969-06-0 | - | 6 | |
| Keton resin | 25054-06-2 | - | 14 | |
| Triethanolamine | 102-71-6 | 203-049-8 | 4 | |
| Phosphoric acid ester | 90506-69-7 | 291-933-4 | (5) 1 | |

| Dangerous components: | | | | | |
|-----------------------|------------------|--|-----|--|--|
| CAS: 100-51-6 | Benzyl alcohol | Xn R20/22 | 25% | | |
| EINECS: 202-859-9 | (6,) | Acute Tox. 4, H302; Acute Tox. 4, H332 | (6) | | |
| CAS: 122-99-6 | 2-Phenoxyethanol | Xn R22; Xi R36 | 20% | | |
| EINECS: 204-589-7 | | Acute Tox. 4, H302; Eye Irrit. 2, H319 | | | |

· Additional information: For the wording of the listed risk phrases refer to section 16.

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4 SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: In all cases of doubt, seek medical attention.
- · Following inhalation:

Not expected to become a significant inhalation hazard under normal conditions of use. In case of accident by inhalation, supply fresh air and to be sure call for a doctor.

- · Following skin contact: Immediately wash with water and soap and rinse thoroughly.
- · Following eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · Following ingestion: Induce vomiting, if person is conscious. Seek medical help.
- · Information for doctor: Treat symptomatically and supportively.
- · 4.2 Most important symptoms and effects, both acute and delayed No information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No information available.

5 SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, dry chemical powder, water spray.
- · Unsuitable extinguishing agents: No information available.
- · 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide

Other irritating and toxic gases.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear suitable protective clothing and eye/face protection.

6 SECTION 6: Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures

Refer to Section 8 for personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

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· 6.2 Environmental precautions

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

· 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

· 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.

7 SECTION 7: Handling and storage

· 7.1 Handling

· Precautions for safe handling:

Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Use this material with adequate ventilation.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

The product is not explosive.

· 7.2 Conditions for safe storage, including any incompatibilities

Store in cool, dry and well-ventilated place. Store away from incompatible materials.

· 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8 SECTION 8: Exposure controls/personal protection

· Information about design of technical facilities:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

100-51-6 Benzyl alcohol (25%)

WEEL (USA) 44 mg/m³, 10 ppm

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102-71-6 2,2',2"-nitrilotriethanol (4%)

TLV (USA) 5 mg/m³

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Ensure adequate ventilation.

- **Respiratory protection:** Suitable respiratory protective device recommended.
- · Skin protection:



Protective gloves

· 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 and face protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 SECTION 9: Physical and chemical properties

- $\cdot \ \textbf{9.1 Information on basic physical and chemical properties}$
- · General Information:
- · Appearance:

Form: Liquid
Colour: Black
· Odour: Odourless

· **pH-value:** Not determined.

· Melting point/Melting range: Not determined.

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| · Boiling point/Boiling range: | Not determined. | | |
| · Flash point: | Not determined. | | (6 |
| · Flammability (solid, gaseous): | Not applicable. | | |
| · Auto-Ignition temperature: | Not determined. | | |
| · Decomposition temperature: | Not determined. | C | |
| · Self-igniting: | Product is not selfigniting. | (6) |) |
| · Danger of explosion: | Product does not present an explos | sion hazard. | |
| · Vapour pressure: | Not determined. | | |
| · Density: | Not determined. | (6,53) | (6 |
| Evaporation rate: | Not determined. | | |
| · Solubility in/Miscibility with: | | | |
| Water: | Not miscible or difficult to mix. | | |
| · Partition coefficient (n-octanol/wa | nter): Not determined. | (6) | (1) |
| · 9.2 Additional information | No further relevant information av | ailable. | |

10 SECTION 10: Stability and reactivity

- · 10.1 Reactivity Stable under recommended storage and handling conditions (see section 7, handling and storage).
- · 10.2 Chemical stability Stable under normal conditions of use, storage and transport.
- · Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- \cdot 10.4 Conditions to avoid Strong heating, fire. Incompatible materials.
- · 10.5 Incompatible materials

Strong acids, strong bases or strong oxidizing agents.

Base metals.

· 10.6 Hazardous decomposition products

Carbon monoxide

Other irritating and toxic gases.

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11 SECTION 11: Toxicological information

· Acute toxicity: No data available.

100-51-6 Benzyl alcohol

Oral LD50 1230 mg/kg (rat)
Dermal LD50 2000 mg/kg (rabbit)

122-99-6 2-Phenoxyethanol

Oral LD50 1260 mg/kg (rat)
Dermal LD50 5000 mg/kg (rabbit)

102-71-6 2,2',2"-nitrilotriethanol

Oral LD50 4920 mg/kg (rat)
Dermal LD50 > 2000 mg/kg (rabbit)

- · Skin corrosion/irritation: No irritant effect.
- · Serious eye damage/irritation: Cause serious eye irritation.
- · Respiratory or skin sensitization: No sensitizing effects known.
- · Specific target organ system toxicity: No information available.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): No information available.

12 SECTION 12: Ecological information

· 12.1 Toxicity

| · Acquatic toxicity | | | |
|---------------------|--|------------|----------|
| 122-99-6 2-Pheno | oxyethanol | | |
| EC50 - Crustacea | > 500 mg/L/48h mg/L/48h (Daphnia magna) | | |
| IC50 - Algae | > 500 mg/L/72 h mg/L/48h (Desmodesmus subspicatus (green algae)) | | |
| LC50 - Fish | 220 - 460 mg/L/48h (Leuciscus idus (Golden orfe)) | | |
| 102-71-6 2,2',2''-1 | nitrilotriethanol | | 160 |
| LC50 - Fish | 450 - 1000 mg/L mg/L/48h (Lepomis macrochirus) | | |
| EC50 - Crustacea | 609,88 mg/L/48h mg/L/48h (Daphnia magna) | | |
| IC50 - Algae | 216 mg/L/72h mg/L/48h (Desmodesmus subspicatus (green algae)) | | |
| 100-51-6 Benzyl a | alcohol | | |
| EC50 - Algae | 700 mg/L/72h mg/L/48h (Pseudokirchneriella Subcatitata) | | |
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EC50 - Crustacea 230 mg/L/48h mg/L/48h (Daphnia magna)

LC50 - Fish 460 mg/L/96h mg/L/48h (Pimephales promelas (fathead minnow))

- 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.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No information available.

13 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.

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

14 SECTION 14: Transport information

- · 14.1 Land transport
- ADR/RID class: Not regulated.UN-Number: Not applicable.
- · 14.2 Maritime transport
- · IMDG Class: Not regulated.· UN Number: Not applicable.
- · Marine pollutant: No
- · 14.3 Air transport
- ICAO/IATA Class: Not regulated. • UN/ID Number: Not applicable.
- · 14.4 Environmental hazards: Not applicable.

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- 14.5 Special precautions for user Not applicable.
- · 14.6 Transport/Additional information: Not dangerous according to the above specifications.

15 SECTION 15: Regulatory information

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

EU Regulation:

Authorisations: No information available. Restrictions on use: No information available.

Regulatory information

| | CAS No. | EU | US | Japan | Canada | Austrlia | Korea | China |
|---|------------|------------|------------|------------|------------|------------|------------|------------|
| | | (EINECS) | (TSCA) | (ENCS) | (DSL/ | (AICS) | (ECL) | (IECSC) |
| L | | | | | NDSL) | | | |
| | 65113-55-5 | Listed | Listed | Not listed | NDSL | Not listed | Not listed | Not listed |
| | 100-51-6 | Listed | Listed | Listed | DSL | Listed | Listed | Listed |
| | 122-99-6 | Listed | Listed | Listed | DSL | Listed | Listed | Listed |
| | 24969-06-0 | Not listed | Listed | Not listed | DSL | Listed | Listed | Listed |
| | 25054-06-2 | Not listed | Listed | Not listed | DSL | Listed | Listed | Listed |
| | 102-71-6 | Listed | Listed | Listed | DSL | Listed | Listed | Listed |
| | 90506-69-7 | Listed | Not listed | Not listed | Not listed | Not listed | Not listed | Listed |

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

16 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:

R20/22: Harmful by inhalation and if swallowed.

R36: Irritating to eyes.

H302: Harmful if swallowed.

H332: Harmful if inhaled.

 \cdot $\boldsymbol{Training\ hints:}$ Provide adequate information, instruction and training for operators.

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· Date issuing SDS: March 26, 2012

· Sources:

ESIS: European chemical Substances Information System.

GESTIS-database: Information system on hazardous substances of the German Social Accident Insurance.

ECHA's public database with information on registered substances.

