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## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

Product code **22385**  
 Product name **Yellow**  
 Product category **Optimizer Eco Solvent Ink for Roland**

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use Printing operations

### 1.3 Details of the supplier of the safety data sheet

DATAPLOT GmbH  
 Gutenbergstraße 15  
 D-24558 Henstedt-Ulzburg  
 Germany  
 Tel.: +49 4193-9950  
 Fax: +49 4193-995220

### For further information, please contact

Contact person Dataplot: +49 4193-9950  
 E-mail address info@dataplot.de

### 1.4 Emergency telephone number

Giftinformationszentrum Mainz, Germany  
 Tel: +49 6131 19240

## Section 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

According to Regulation (EC) No 1272/2008

|  |                     |
|--|---------------------|
| Serious eye damage/eye irritation                | Category 1 - (H318) |
| Specific target organ toxicity (single exposure) | Category 3 - (H336) |

### 2.2 Label elements



Signal Word  
Danger

### Hazard Statements

H318 - Causes serious eye damage  
 H336 - May cause drowsiness or dizziness

### Precautionary Statements - EU (§28, 1272/2008)

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

do. Continue rinsing  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection

### 2.3 Other Hazards

#### General Hazards

No information available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

| Component                               | EC No.    | CAS-No    | Weight % | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH No.         | Note |
|---|-----------|-----------|----------|---|-------------------|------|
| Diethylene glycol diethyl ether         | 203-963-7 | 112-36-7  | 30 - 60  | Eye Irrit. 2 (H319)   | No data available |      |
| Butyrolactone                           | 202-509-5 | 96-48-0   | 10 - 30  | Acute Tox. 4 (H302)<br>Eye Dam. 1 (H318)<br>STOT SE 3 (H336)    | No data available | 1    |
| Ethylene glycol monobutyl ether acetate | 203-933-3 | 112-07-2  | 5 - 10   | Acute Tox. 4 (H312)<br>Acute Tox. 4 (H332)                      | No data available | 1    |
| Triethylene glycol monobutyl ether      | 205-592-6 | 143-22-6  | 1 - 5    | Eye Dam. 1 (H318)   | No data available |      |
| Dimethyl Succinate                      | 203-419-9 | 106-65-0  | 1 - 5    | Not Classified  | No data available | 1    |
| Dimethyl Glutarate                      | 214-277-2 | 1119-40-0 | 1 - 5    | Not Classified  | No data available | 1    |

Note

1. Substance with a Community workplace exposure limit

Full text of H- and EUH-phrases: see section 16

## Section 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General Advice

Show this safety data sheet to the doctor in attendance.

#### Eye Contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists.

#### Skin Contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention.

#### Inhalation

Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.

#### Ingestion

Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

### 4.2 Most important symptoms and effects, both acute and delayed

None under normal use conditions.

### 4.3 Indication of any immediate medical attention and special treatment needed

#### Notes to Physician

Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable Extinguishing Media

Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable Extinguishing Media

No information available.

### 5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions.

### 5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray. Sealed containers may rupture when heated.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### 6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

### 6.4 Reference to other sections

See Section 12 for more information.

## Section 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Keep out of the reach of children.

### 7.3 Specific end use(s)

|                                      |  |
|--------------------------------------|--|
| <b>Exposure Scenario</b>             | No information available.  |
| <b>Risk Management Methods (RMM)</b> | The information required is contained in this Safety Data Sheet. |

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure limits

| Component   | The United Kingdom   |
|---|--|
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | STEL: 50 ppm<br>STEL: 332 mg/m <sup>3</sup><br>TWA: 20 ppm<br>TWA: 133 mg/m <sup>3</sup><br>Skin |

| Component   | France   |
|---|--|
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | TWA/VME: 2 ppm (indicative limit)<br>TWA/VME: 13.3 mg/m <sup>3</sup> (indicative limit)<br>STEL/VLCT: 30 ppm (indicative limit)<br>STEL/VLCT: 199.8 mg/m <sup>3</sup> (indicative limit)<br>Skin |

| Component                               | Germany         |
|---|-----------------|
| Ethylene glycol monobutyl ether acetate | TWA/MAK: 10 ppm |

|   |   |
|---|---|
| 112-07-2  | TWA/MAK: 66 mg/m <sup>3</sup><br>Peak: 20 ppm<br>Peak: 132 mg/m <sup>3</sup><br>TWA/AGW: 20 ppm<br>TWA/AGW: 130 mg/m <sup>3</sup><br>Skin |
| Dimethyl Succinate<br>106-65-0                      | TWA/AGW: 1.2 ppm<br>TWA/AGW: 8 mg/m <sup>3</sup>  |
| Dimethyl Glutarate<br>1119-40-0                     | TWA/AGW: 1.2 ppm<br>TWA/AGW: 8 mg/m <sup>3</sup>  |
| <b>Component</b>                                    | <b>Spain</b>  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | STEL/VLA-EC: 50 ppm<br>STEL/VLA-EC: 333 mg/m <sup>3</sup><br>TWA/VLA-ED: 20 ppm<br>TWA/VLA-ED: 133 mg/m <sup>3</sup><br>Skin              |
| <b>Component</b>                                    | <b>Italy</b>  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | TWA: 20 ppm<br>TWA: 133 mg/m <sup>3</sup><br>STEL: 50 ppm<br>STEL: 333 mg/m <sup>3</sup><br>Skin  |
| <b>Component</b>                                    | <b>Portugal</b>   |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | TWA/VLE-MP: 20 ppm  |
| <b>Component</b>                                    | <b>The Netherlands</b>  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | STEL: 333 mg/m <sup>3</sup><br>TWA: 135 mg/m <sup>3</sup><br>Skin   |
| <b>Component</b>                                    | <b>Finland</b>  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | TWA: 20 ppm<br>TWA: 130 mg/m <sup>3</sup><br>STEL: 50 ppm<br>STEL: 330 mg/m <sup>3</sup><br>Skin  |
| <b>Component</b>                                    | <b>Denmark</b>  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | TWA: 20 ppm<br>TWA: 130 mg/m <sup>3</sup><br>Skin   |
| <b>Component</b>                                    | <b>Austria</b>  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | STEL/KZW: 40 ppm<br>STEL/KZW: 270 mg/m <sup>3</sup><br>TWA/TMW: 20 ppm<br>TWA/TMW: 133 mg/m <sup>3</sup><br>Skin                          |
| <b>Component</b>                                    | <b>Switzerland</b>  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | STEL/KZW: 20 ppm<br>STEL/KZW: 132 mg/m <sup>3</sup><br>TWA/MAK: 10 ppm<br>TWA/MAK: 66 mg/m <sup>3</sup><br>Skin                           |
| <b>Component</b>                                    | <b>Poland</b>   |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | NDSch: 300 mg/m <sup>3</sup><br>TWA/NDS: 100 mg/m <sup>3</sup><br>Skin  |
| <b>Component</b>                                    | <b>Norway</b>   |
| Ethylene glycol monobutyl ether acetate             | TWA: 10 ppm   |

|   |  |
|---|--|
| 112-07-2  | TWA: 65 mg/m <sup>3</sup><br>Skin  |
| <b>Component</b>                                    | <b>Ireland</b>   |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | TWA: 20 ppm<br>TWA: 133 mg/m <sup>3</sup><br>STEL: 50 ppm<br>STEL: 333 mg/m <sup>3</sup><br>Skin |
| <b>Component</b>                                    | <b>Australia TWA</b>   |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | TWA: 20 ppm<br>TWA: 133 mg/m <sup>3</sup>  |
| <b>Component</b>                                    | <b>Australia STEL</b>  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | STEL: 50 ppm<br>STEL: 333 mg/m <sup>3</sup>  |

**Derived No Effect Level (DNEL)** No information available.  
**Predicted No Effect Concentration (PNEC)** No information available.

## 8.2 Exposure controls

### Engineering Measures

Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

### Personal protective equipment

#### Eye/face Protection

Wear safety glasses with side shields (or goggles). If splashes are likely to occur. Wear suitable face shield. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

#### Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

#### General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

**Environmental exposure controls** No information available.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

|                              |                          |                         |                          |
|------------------------------|--------------------------|-------------------------|--------------------------|
| <b>Physical State</b>        | Liquid                   | <b>Appearance</b>       | Colored                  |
| <b>Odor</b>                  | No information available | <b>Odor Threshold</b>   | No information available |
| <b>Property</b>              | <b>Values</b>            | <b>Remarks • Method</b> |                          |
| pH                           |                          | No data available       |                          |
| Melting point/freezing point |                          | No data available       |                          |
| Boiling point/Boiling Range  | > 149 °C / 300 °F        |                         |                          |
| Flash Point                  | 82 °C / 180 °F           | Closed cup (Minimum)    |                          |
| Evaporation rate             |                          | No data available       |                          |
| Flammability Limit in Air    |                          | No data available       |                          |
| Upper flammability limit     |                          | No data available       |                          |
| Lower flammability limit     |                          | No data available       |                          |
| Vapor Pressure               |                          | No data available       |                          |
| Vapor Density                |                          | No data available       |                          |
| Specific Gravity             | 1                        |                         |                          |

|   |                   |
|---|-------------------|
| <b>Water Solubility</b>                       | No data available |
| <b>Solubility in other solvents</b>           | No data available |
| <b>Partition coefficient: n-octanol/water</b> | No data available |
| <b>Autoignition Temperature</b>               | No data available |
| <b>Decomposition temperature</b>              | No data available |
| <b>Kinematic viscosity</b>                    | No data available |
| <b>Dynamic viscosity</b>                      | No data available |
| <b>Explosive Properties</b>                   | No data available |
| <b>Oxidizing Properties</b>                   | No data available |

**9.2 Other information**

**Softening Point** No data available

## Section 10: STABILITY AND REACTIVITY

**10.1 Reactivity**

No information available.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of Hazardous Reactions**

None under normal processing.

**10.4 Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition.

**10.5 Incompatible materials**

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

**10.6 Hazardous decomposition products**

Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

## Section 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects****Acute Toxicity**

|                     |                                    |
|---------------------|------------------------------------|
| <b>Inhalation</b>   | There is no data for this product. |
| <b>Eye Contact</b>  | There is no data for this product. |
| <b>Skin Contact</b> | There is no data for this product. |
| <b>Ingestion</b>    | There is no data for this product. |

**Unknown Acute Toxicity** 55.08 % of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

|                                      |                |
|--------------------------------------|----------------|
| <b>ATEmix (oral)</b>                 | 2,238.00 mg/kg |
| <b>ATEmix (dermal)</b>               | 7,007.00 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 7.91 mg/L      |
| <b>ATEmix (inhalation-vapor)</b>     | 58.00 mg/L     |

**Unknown Acute Toxicity**

55.08 % of the mixture consists of ingredient(s) of unknown toxicity.  
 50.58 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.  
 50.58 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.  
 55.08 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).  
 55.08 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).  
 55.08 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

| Component   | Oral LD50           |
|---|---------------------|
| Butyrolactone<br>96-48-0                            | 1540 mg/kg ( Rat )  |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | 1600 mg/kg ( Rat )  |
| Triethylene glycol monobutyl ether<br>143-22-6      | 5300 mg/kg ( Rat )  |
| Dimethyl Succinate<br>106-65-0                      | >5000 mg/kg ( Rat ) |
| Dimethyl Glutarate<br>1119-40-0                     | 8191 mg/kg ( Rat )  |

| Component   | LD50 Dermal            |
|---|------------------------|
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | 1480 mg/kg ( Rabbit )  |
| Triethylene glycol monobutyl ether<br>143-22-6      | 3480 mg/kg ( Rabbit )  |
| Dimethyl Succinate<br>106-65-0                      | >5000 mg/kg ( Rabbit ) |

| Component                       | Inhalation LC50        |
|---------------------------------|------------------------|
| Butyrolactone<br>96-48-0        | >2.68 mg/L ( Rat ) 4 h |
| Dimethyl Glutarate<br>1119-40-0 | >5.6 mg/L ( Rat ) 4 h  |

|                                  |                                    |
|----------------------------------|------------------------------------|
| <b>Skin corrosion/irritation</b> | There is no data for this product. |
| <b>Eye damage/irritation</b>     | There is no data for this product. |
| <b>Sensitisation</b>             | There is no data for this product. |
| <b>Mutagenic Effects</b>         | There is no data for this product. |
| <b>Carcinogenic effects</b>      | There is no data for this product. |
| <b>Reproductive Effects</b>      | There is no data for this product. |

|                                 |                                    |
|---------------------------------|------------------------------------|
| <b>STOT - single exposure</b>   | There is no data for this product. |
| <b>STOT - repeated exposure</b> | There is no data for this product. |
| <b>Aspiration hazard</b>        | There is no data for this product. |

## Section 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

None known

#### Unknown Aquatic Toxicity

0.01 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Component   | Algae/aquatic plants  |
|---|---|
| Butyrolactone<br>96-48-0                            | 72h EC50 Desmodesmus subspicatus: 360 mg/L<br>96h EC50 Desmodesmus subspicatus: 79 mg/L |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | 72h EC50 Desmodesmus subspicatus: >500 mg/L   |
| Triethylene glycol monobutyl ether<br>143-22-6      | 72h EC50 Desmodesmus subspicatus: 500 mg/L  |

| Component                                      | Fish  |
|--|---|
| Butyrolactone<br>96-48-0                       | 96h LC50 Leuciscus idus: 220 - 460 mg/L [static]  |
| Triethylene glycol monobutyl ether<br>143-22-6 | 96h LC50 Leuciscus idus: 2200 - 4600 mg/L [static]<br>96h LC50 Pimephales promelas: 2400 mg/L<br>96h LC50 Pimephales promelas: 2400 mg/L [static] |
| Dimethyl Succinate<br>106-65-0                 | 96h LC50 Brachydanio rerio: 50 - 100 mg/L [static]  |
| Dimethyl Glutarate<br>1119-40-0                | 96h LC50 Pimephales promelas: 19.6 - 26.2 mg/L [static]   |

| Component                                      | Crustacea                                  |
|--|--|
| Butyrolactone<br>96-48-0                       | 48h EC50 Daphnia magna Straus: >500 mg/L   |
| Triethylene glycol monobutyl ether<br>143-22-6 | 48h EC50 Daphnia magna: 500 mg/L           |
| Dimethyl Glutarate<br>1119-40-0                | 48h EC50 Daphnia magna: 122.1 - 163.5 mg/L |

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

No information available.

| Component   | Partition coefficient |
|---|-----------------------|
| Butyrolactone<br>96-48-0                            | -0.566                |
| Ethylene glycol monobutyl ether acetate<br>112-07-2 | 1.51                  |
| Triethylene glycol monobutyl ether<br>143-22-6      | 0.51                  |
| Dimethyl Succinate<br>106-65-0                      | 0.19                  |

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

**12.6 Other adverse effects.**

No information available.

## Section 13: DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Waste from Residues / Unused Products** Contain and dispose of waste according to local regulations.

**Contaminated Packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

## Section 14: TRANSPORT INFORMATION

**ADR**

14.2 Proper Shipping Name

Not Regulated

Printing Ink

**ICAO / IATA / IMDG / IMO**

14.2 Proper Shipping Name

Not Regulated

Printing Ink

## Section 15: REGULATORY INFORMATION

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

European Union



**International Inventories**

For further information, please contact: Supplier (manufacturer/importer/downstream user/distributor)

**15.2 Chemical Safety Assessment**

No information available.

**Section 16: OTHER INFORMATION****Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under sections 2 and 3**

H312 - Harmful in contact with skin  
H332 - Harmful if inhaled  
H319 - Causes serious eye irritation  
H318 - Causes serious eye damage  
H302 - Harmful if swallowed  
H336 - May cause drowsiness or dizziness

**Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

|         |                                  |
|---------|----------------------------------|
| TWA     | TWA (time-weighted average)      |
| STEL    | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value              |

**Revision Date** Apr-22-2016

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**