

Safety Data Sheet

according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

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

- **1.1 Product identifier**
- **Trade name: 2001 UV Concentrate**
- **Article number: 777**
- **Application of the substance / the preparation UV Lens Treatment**
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Practical Systems, Inc. (PSI)
11617 Prospect Road
Odessa, FL 33556
Phone: 727-376-7900
Toll Free: 800-237-8154
- **Further information obtainable from:** Product Safety Department
- **1.4 Emergency telephone number: 727-376-7900**

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

R25: Toxic if swallowed.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **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**

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

- **Hazard pictograms**



GHS06

- **Signal word** Danger

(Contd. on page 2)

Safety Data Sheet
 according to 1907/2006/EC (REACH),
 1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 1)

- **Hazard-determining components of labelling:**

2,2',4,4'-tetrahydroxybenzophenone
 ethanediol
 sodium dodecylbenzenesulphonate, pure

- **Hazard statements**

H301 Toxic if swallowed.
 Safety data sheet available on request.

- **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.
 P264 Wash thoroughly after handling.
 P270 Do no eat, drink or smoke when using this product.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P321 Specific treatment (see on this label).
 P330 Rinse mouth.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Hazard description:**

- **WHMIS-symbols:**

D1B - Toxic material causing immediate and serious toxic effects



- **NFPA ratings (scale 0 - 4)**



Health = 3
 Fire = 1
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH 3 Health = 3
 FIRE 1 Fire = 1
 REACTIVITY 0 Reactivity = 0

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture of substances listed below with nonhazardous additions.

(Contd. on page 3)

Safety Data Sheet

according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 2)

Dangerous components:

CAS: 131-55-5 EINECS: 205-028-9	2,2',4,4'-tetrahydroxybenzophenone ☒ Xn R22 ⚠ Acute Tox. 4, H302	50-100%
CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1	ethanediol ☒ Xn R22 ⚠ Acute Tox. 4, H302	25-50%
CAS: 68131-39-5	alcohols, C12-15, ethoxylated ☒ Xi R36/38; ☒ N R50/53 ⚠ Aquatic Acute 1; Aquatic Chronic 1, H410 ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	≤ 2,5%

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

4 First aid measures

4.1 Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Generally the product does not irritate the skin.

If skin irritation continues, consult a doctor.

After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Do not induce vomiting; call for medical help immediately.

Rinse out mouth and then drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

Dizziness

Gastric or intestinal disorders

Thirst

Nausea

Hazards Condition may deteriorate with alcohol consumption.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

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

(Contd. on page 4)

Safety Data Sheet
 according to 1907/2006/EC (REACH),
 1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 3)

- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation
- **6.2 Environmental precautions:** 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).
Dispose contaminated material as waste according to item 13.
Clean the affected area carefully; suitable cleaners are:
Warm water and cleansing agent
- **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 Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **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:**
Store away from foodstuffs.
Do not store together with oxidizing and acidic materials.
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

(Contd. on page 5)

Safety Data Sheet

according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 4)

· 8.1 Control parameters

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

107-21-1 ethanediol

IOELV (EU)	Short-term value: 104 mg/m ³ , 40 ppm Long-term value: 52 mg/m ³ , 20 ppm Skin
TLV (USA)	Short-term value: C 100 mg/m ³ H
EL (Canada)	Short-term value: C 100* 20** mg/m ³ , C 50*** ppm Long-term value: 10** mg/m ³ *Aerosol; **Particulate; ***Vapour

· **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.
Wash hands before breaks and at the end of work.

· Respiratory protection:

Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.

· 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

Rubber 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Safety glasses

(Contd. on page 6)

Safety Data Sheet
 according to 1907/2006/EC (REACH),
 1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 5)

· **Body protection:** Protective work clothing**9 Physical and chemical properties**· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· **Form:** Liquid
 · **Colour:** Light yellow

· **Odour:** Odourless· **Odour threshold:** Not determined.· **pH-value:** Not determined.· **Change in condition**· **Melting point/Melting range:** Undetermined.· **Boiling point/Boiling range:** 195°C (383 °F)· **Flash point:** 111°C (232 °F)· **Flammability (solid, gaseous):** Not applicable.· **Ignition temperature:** 410°C (770 °F)· **Decomposition temperature:** Not determined.· **Self-igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits:**· **Lower:** Not determined.· **Upper:** Not determined.· **Vapour pressure at 20°C:** 0,1 hPa (< 0,1 mm Hg Estimated)· **Density at 20°C:** 1,14 g/cm³· **Relative density** Not determined.· **Vapour density** Not determined.· **Evaporation rate** Not determined.· **Solubility in / Miscibility with water:**

Fully miscible.

· **Segregation coefficient (n-octanol/water):** Not determined.· **Viscosity:**· **Dynamic:** Not determined.· **Kinematic:** Not determined.· **9.2 Other information** No further relevant information available.

(Contd. on page 7)

Safety Data Sheet

according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 6)

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:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

107-21-1 ethanediol

Oral	LD50	5840 mg/kg (rat)
Dermal	LD50	9530 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:**
Irritating effect.
No irritating effect.
- **Sensitization:** Sensitizing effect by skin contact is possible by prolonged exposure.
- **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:
Toxic

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** Moderately /partly biodegradable
- **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 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Contd. on page 8)

Safety Data Sheet

according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 7)

- 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.

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.
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|---|-----------------|
| · 14.1 UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | N/A |
| · 14.2 UN proper shipping name | |
| · DOT, ADR, ADN, IMDG, IATA | N/A |
| · 14.3 Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | N/A |
| · 14.4 Packing group | |
| · DOT, ADR, IMDG, IATA | N/A |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

(Contd. on page 9)

Safety Data Sheet
according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 8)

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· Section 355 (extremely hazardous substances):
--

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):
--

107-21-1 ethanediol

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:
--

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:
--

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic Categories

· EPA (Environmental Protection Agency)
--

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

107-21-1 ethanediol		A4
-----------------------	--	----

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)
--

None of the ingredients is listed.

· Canada

· Canadian Domestic Substances List (DSL)
--

All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

Ingredients are listed as required.

107-21-1 ethanediol

(Contd. on page 10)

Safety Data Sheet
according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 08.06.2012

Revision: 07.06.2012

Trade name: 2001 UV Concentrate

(Contd. of page 9)

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

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H410 Very toxic to aquatic life with long lasting effects.

R22 Harmful if swallowed.

R36/38 Irritating to eyes and skin.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:

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

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent