

# MATERIAL SAFETY DATA SHEET

N-568-S, N-568-S2 and N-120-S

Version 1.1

MSDS Date: 2019-08-22



## SECTION 1: Product and Company Identification

**Product Name:** Standard Solution for the NanoPhotometer NP80/N60/N50  
**Item Number:** N-568-S, N-568-S2 or N-120-S

**Manufacturer:** Implen GmbH  
Schatzbogen 52  
D-81829 München  
Germany

**Phone:** +49 (0)89 726 371 80

**Product Use:** For research use only

## SECTION 2: Identification of the Substance/Ingredients

### Component 1 Potassium hydrogen phthalate

Molecular Formula:  $C_8H_5KO_4$   
Molecular Weight: 204.22 g/mol  
CAS No.: 877-24-7

### Component 2 Water

Molecular Formula:  $H_2O$   
Molecular Weight: 18.02 g/mol  
CAS No.: 7732-18-5

## SECTION 3: Hazards Identification

### 3.1 Classification of the substance or mixture

#### 3.1.1 Classification according to Regulation (EC) No. 1272/2008 [CLP]

This substance is classified as not hazardous according to regulation (EC) No. 1272/2008 [CLP].

#### 3.1.2 Classification according to Directive 67/548/EEC or 1999/45/EC

This substance is classified as not hazardous according to 67/548/EEC.

### 3.2 Label elements

#### 3.2.1 Labelling according to Regulation (EC) No. 1272/2008 [CLP]

According to EC directives or the corresponding national regulations the product does not have to be labelled.

#### 3.2.2 Labelling (67/548/EEC or 1999/45/EC)

According to EC directives or the corresponding national regulations the product does not have to be labelled.

## SECTION 4: First Aid Measures

### 4.1 General information

When in doubt or if symptoms are observed, seek medical advice. If unconscious, place in recovery position and seek medical attention. Never give anything orally to an unconscious person or a person with cramps. Change contaminated/saturated clothing. Never leave affected person unattended.

# MATERIAL SAFETY DATA SHEET

N-568-S, N-568-S2 and N-120-S

Version 1.1

MSDS Date: 2019-08-22



## **After inhalation**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

## **In case of skin contact**

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

## **After eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

## **In case of ingestion**

If swallowed, rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

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

no data available

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

no data available

## **4.4 Self-protection of the first aider**

First aider: Pay attention to self-protection!

## **4.5 Information to physician**

no data available

# **SECTION 5: Firefighting Measures**

## **5.1 Extinguishing media**

### **Suitable extinguishing media**

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

### **Extinguishing media which must not be used for safety reasons**

no restriction

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

In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>) Carbon monoxide Sulphur oxides

## **5.3 Advice for firefighters**

DO NOT fight fire when fire reaches explosives. In case of fire: Wear self-contained breathing apparatus.

## **5.4 Additional information**

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Use water spray jet to protect personnel and to cool endangered containers.

# MATERIAL SAFETY DATA SHEET

N-568-S, N-568-S2 and N-120-S

Version 1.1

MSDS Date: 2019-08-22



## SECTION 6: Accidental Release Measures

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

Avoid generation of dust. Do not breathe dust. Provide adequate ventilation. Use personal protection equipment. In case of major fire and large quantities: Remove persons to safety.

### 6.2 Environmental precautions

Discharge into the environment must be avoided.

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

Spilled product must never be returned to the original container for recycling. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area.

### 6.4 Additional information

Clear spills immediately.

## SECTION 7: Handling and Storage

### 7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible: Inhalation skin contact Eye contact if handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Keep away from sources of ignition. - No smoking. Usual measures for fire prevention. Keep away from: Oxidizing agent

### 7.2 Conditions for Safe Storage

Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

#### 8.2.2 Personal protection equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

#### Eyeface protection

Eye glasses with side protection DIN-/EN-Norms: DIN EN 166

#### Skin protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommended glove articles DIN-/EN-Norms: DIN EN 374 In the case of wanting to use the gloves again, clean them before taking off and air them well.

# MATERIAL SAFETY DATA SHEET

N-568-S, N-568-S2 and N-120-S

Version 1.1

MSDS Date: 2019-08-22



## **By short-term hand contact**

|                                           |                      |
|-------------------------------------------|----------------------|
| Suitable material:                        | NBR (Nitrile rubber) |
| Thickness of the glove material:          | 0.12 mm              |
| Breakthrough time (maximum wearing time): | > 480 min            |

## **By long-term hand contact**

|                                           |                      |
|-------------------------------------------|----------------------|
| Suitable material:                        | NBR (Nitrile rubber) |
| Thickness of the glove material:          | 0.38 mm              |
| Breakthrough time (maximum wearing time): | > 480 min            |

## **Respiratory protection**

Usually no personal respiratory protection necessary. Suitable respiratory protection apparatus:

Recommendation: no data available

Suitable material: no data available

Recommendation: no data available

## **Additional information**

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

## **SECTION 9: Physical and Chemical Properties**

|                      |                                  |
|----------------------|----------------------------------|
| Appearance:          | Colorless liquid                 |
| Odor:                | Odorless                         |
| Physical State:      | Liquid                           |
| pH:                  | 4 (20°C; 80g/l)                  |
| Boiling Point:       | 100 ° C (water); 212 ° F (water) |
| Freezing Point:      | 0.0 ° C; 32.0 ° F                |
| Vapor Pressure:      | No information available         |
| Vapor Density:       | No information available         |
| Specific Gravity:    | 1.0 (water)                      |
| Evaporation Rate:    | No information available         |
| Solubility in Water: | Soluble                          |

## **SECTION 10: Stability and Reactivity**

### **10.1 Reactivity**

no data available

### **10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature).

### **10.3 Possibility of hazardous reactions**

no data available

**10.4 Conditions to avoid**

no data available

**10.5 Incompatible materials**

no data available

**10.6 Hazardous decomposition products**

no data available

**10.7 Additional information**

no data available

**SECTION 11: Toxicological Information**

**11.1 Information on toxicological effects**

**11.1.1 Acute effects**

Acute oral toxicity:

LD50 (oral. Rat): >3200 mg/kg (RTECS)

Acute dermal toxicity:

no data available

Acute inhalation toxicity:

no data available

**Irritant and corrosive effects**

Primary irritation to the skin:

not applicable

Irritation to eyes:

not applicable

Irritation to respiratory tract:

not applicable

**Respiratory or skin sensitization**

In case of skin contact:

not sensitizing

After inhalation:

not sensitizing

**STOT-single exposure**

not applicable

**STOT-repeated exposure**

not applicable

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Carcinogenicity**

No indication of human carcinogenicity.

**Germ cell mutagenicity**

No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

No indications of human reproductive toxicity exist.

**Aspiration hazard**

not applicable

**Other adverse effects**

no data available

**Additional information**

no data available

**SECTION 12: Ecological information**

**12.1 Ecotoxicity**

Acute (short-term) fish toxicity:

no data available

Chronic (long-term) fish toxicity:

no data available

# MATERIAL SAFETY DATA SHEET

N-568-S, N-568-S2 and N-120-S

Version 1.1

MSDS Date: 2019-08-22



|                                       |                   |
|---------------------------------------|-------------------|
| Acute (short-term) daphnia toxicity:  | no data available |
| Chronic (long-term) daphnia toxicity: | no data available |
| Acute (short-term) algae toxicity:    | no data available |
| Chronic (long-term) algae toxicity:   | no data available |

## 12.2 Persistence and degradability

no data available

## 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: 1.415

## 12.4 Mobility in soil:

no data available

## 12.5 Results of PBT/vPvB assessment

no data available

## 12.6 Other adverse effects

no data available

## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

#### Appropriate disposal / Product

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal. The waste is to be kept separate from other types of waste until its disposal.  
Waste code product: no data available

#### Appropriate disposal / Package

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

#### Additional information

no data available

## SECTION 14: Transport information

### Land transport (ADR/RID)

No dangerous good in sense of this transport regulation.

### Sea transport (IMDG)

No dangerous good in sense of this transport regulation.  
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  
not relevant

### Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.

# MATERIAL SAFETY DATA SHEET

N-568-S, N-568-S2 and N-120-S

Version 1.1

MSDS Date: 2019-08-22



## SECTION 15: Regulatory information

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

#### General rules

Water hazard class (WGK): slightly hazardous to water (WGK 1)

EU: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance)

EU: Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance)

EU: Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (Text with EEA relevance)

### 15.2 Chemical Safety Assessment

no data available

## SECTION 16: Other Information

### Abbreviations and acronyms

|           |                                                                                                                                                                  |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACGIH:    | American Conference of Governmental Industrial Hygienists                                                                                                        |
| ADR:      | European Agreement concerning the International Carriage of Dangerous Goods by Road                                                                              |
| AGS:      | Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)                                                                                                   |
| CLP:      | Regulation on Classification, Labelling and Packaging of Substances and Mixtures                                                                                 |
| DFG:      | German Research Foundation (Deutsche Forschungsgemeinschaft)                                                                                                     |
| Gestis:   | Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung) |
| IATA-DGR: | International Air Transport Association-Dangerous Goods Regulations                                                                                              |
| ICAO-TI:  | International Civil Aviation Organization-Technical Instructions                                                                                                 |
| IMDG:     | International Maritime Code for Dangerous Goods                                                                                                                  |
| LTV:      | Long Term Value                                                                                                                                                  |
| NIOSH:    | National Institute for Occupational Safety and Health                                                                                                            |
| OSHA:     | Occupational Safety & Health Administration                                                                                                                      |
| PBT:      | Persistent, Bioaccumulative and Toxic                                                                                                                            |
| RID:      | Regulation concerning the International Carriage of Dangerous Goods by Rail                                                                                      |
| STV:      | Short Term Value                                                                                                                                                 |
| SVHC:     | Substances of Very High Concern                                                                                                                                  |
| vPvB:     | very Persistent, very Bioaccumulative                                                                                                                            |

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.