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version no: 4 Revision: 01.06.2018 Printing date 01.06.2018

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

. 1.1 Product identifier

. Trade name: (CD-11) B&W PAPER DEVELOPER

. Article number: 100138

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

No further relevant information available.

. Application of the substance / the mixture Black and white developer for photographic use

. 1.3 Details of the supplier of the safety data sheet

. Manufacturer/Supplier:

Fotospeed (Jay House Ltd)

Unit 6B, Park Lane Industrial Estate, Corsham, Wiltshire,

**SN13 9LG** 

01249 714555

www.fotospeed.com; sales@fotospeed.com

. Further information obtainable from: Sales@fotospeed.com

. 1.4 Emergency telephone number: 01249 714555

## **SECTION 2: Hazards identification**

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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

Skin Sens. 1 H317 May cause an allergic skin reaction. Muta. 2 H341 Suspected of causing genetic defects.

Carc. 2 H351 Suspected of causing cancer. Aquatic Acute 1 H400 Very toxic to aquatic life.

- . 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









GHS05

GHS07

GHS08

GHS09

. Signal word Danger

. Hazard-determining components of labelling:

hydroquinone

. Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

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. Precautionary statements

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

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

present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor. P310 If skin irritation occurs: Get medical advice/attention. P332+P313

Dispose of contents/container in accordance with local regulations. P501

. 2.3 Other hazards

. Results of PBT and vPvB assessment

. PBT: Not applicable. . vPvB: Not applicable.

## **SECTION 3: Composition/information on ingredients**

. 3.2 Chemical characterisation: Mixtures

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

. Dangerous components:

CAS: 123-31-9 hydroquinone

EINECS: 204-617-8 ♦ Muta. 2, H341; Carc. 2, H351; ♦ Eye Dam. 1, H318; ♦ Aquatic Acute

Index number: 604-005-00-4 1, H400 (M=10); Acute Tox. 4, H302; Skin Sens. 1, H317

Reg.nr.: 01-2119524016-51

CAS: 584-08-7 potassium carbonate 1-5%

EINECS: 209-529-3 **(1)** Skin Irrit. 2, H315; Eye Irrit. 2, H319

Reg.nr.: 01-2119532646-36

CAS: 1330-43-4 disodium tetraborate, anhydrous 1-5%

EINECS: 215-540-4 

Index number: 005-011-00-4

CAS: 140-01-2 Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5) 1-5%

EINECS: 205-391-3 ♠ Repr. 2, H361; STOT RE 2, H373; ♠ Acute Tox. 4, H332; Skin Irrit. 2,

Reg.nr.: 01-2119474445-33 H315; Eye Irrit. 2, H319

CAS: 1310-73-2 sodium hydroxide (caustic soda) <1%

EINECS: 215-185-5 Skin Corr. 1A, H314

Index number: 011-002-00-6 Reg.nr.: 01-2119457892-27 . Not hazardous components:

CAS: 10117-38-1 potassium sulphite 10-<25%

EINECS: 233-321-1 Reg.nr.: 01-2119537319-34

50-90% CAS: 7732-18-5 water

EINECS: 231-791-2

. SVHC

1330-43-4 disodium tetraborate, anhydrous

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

## **SECTION 4: First aid measures**

- . 4.1 Description of first aid measures
- . **General information:** Immediately remove any clothing/shoes soiled by the product.
- . 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.

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. 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:

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

. 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: Use fire extinguishing methods suitable to surrounding conditions.
- . 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx)

Carbon monoxide (CO)

Sulphur dioxide (SO2)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

- . 5.3 Advice for firefighters
- . Protective equipment: Do not inhale explosion gases or combustion gases.

#### **SECTION 6: Accidental release measures**

. 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

. 6.2 Environmental precautions:

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).

Dispose contaminated material as waste according to item 13.

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.
- . 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 only in the original receptacle.
- . Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

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#### . Further information about storage conditions:

Recommended storage temperature: 15-25°C

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight. Protect from exposure to the light.

Store under lock and key and out of the reach of children.

Recommended storage temperature: 5-30°C

. **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:

#### 123-31-9 hydroquinone (1-5%)

WEL (Great Britain) Long-term value: 0.5 mg/m³
PEL (USA) Long-term value: 2 mg/m³
REL (USA) Ceiling limit: 2\* mg/m³

\*15-min

TLV (USA) Long-term value: 1 mg/m<sup>3</sup>

**DSEN** 

### 1330-43-4 disodium tetraborate, anhydrous (1-5%)

WEL (Great Britain) Long-term value: 1 mg/m³

REL (USA) Long-term value: 1 mg/m³

anhydrous

TLV (USA) Short-term value: 6\* mg/m³

Long-term value: 2\* mg/m³

\*as inhalable fraction

#### 1310-73-2 sodium hydroxide (caustic soda) (<1%)

WEL (Great Britain) Short-term value: 2 mg/m³
PEL (USA) Long-term value: 2 mg/m³
REL (USA) Ceiling limit: 2 mg/m³
TLV (USA) Ceiling limit: 2 mg/m³

. DNELs

### 123-31-9 hydroquinone

Dermal Long-term - systemic - effects 128 mg/kg bw/day (wkd)

Long-term - systemic effects 64 mg/kg bw/day (wkd)

Inhalative Long-term exposure-local effects 7 mg/m³ (wkd)

Long-term - local - effects 1 mg/m³ (wkd) Long-term - systemic effects 1.74 mg/m³ (wkd) Long-term - local effects 0.5 mg/m³ (wkd)

## 1310-73-2 sodium hydroxide (caustic soda)

Oral Long-term - systemic effects 2.3 mg/kg bw/day (Worker (Arbeiter))

Dermal Long-term - systemic - effects 11,718 mg/kg bw/day (general population)

11,718 mg/kg bw/day (Worker (Arbeiter))

Akute - local effects <2 mg/m³ bw/day (Worker (Arbeiter))

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Inhalative Long-term - local - effects 1 mg/m³ (Worker (Arbeiter))

Akute-lokale Effekte 2.5 mg/m³ (Consumer (Verbraucher)) Long-term - systemic-effects 5.7 mg/m³ (Consumer (Verbraucher))

2.1 mg/m³ (Worker (Arbeiter))

#### . PNECs

### 123-31-9 hydroquinone

Aquatic compartment - freshwater 0.000114 mg/l (Water)

Aquatic compartment - marine water 0.000114 mg/l (Water)

Aquatic compartment -water,intermittent releases 0.00134 mg/l (Water)

Aquatic compartment -sediment in freshwater

Aquatic compartment -sediment in marine water

Terrestrial compartment -soil

0.000098 mg/kg sed dw (Water)

0.000097 mg/kg sed dw (Water)

0.000129 mg/kg dw (Soil)

Sewage treatment plant (Abwasserreinigungsanlagen) 0.71 mg/l (Sewage Treatment Plant)

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

#### . 8.2 Exposure controls

- . Personal protective equipment:
- . General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

- **Respiratory protection:** Ensure adequate ventilation
- . Protection of hands:



Protective gloves

#### Impervious gloves

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

Selection of the glove material on consideration of the peneration 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.

Butyl rubber, BR

Nirile rubber, NBR

Neoprene gloves

#### Penetration time of glove material

Gove materialbreakthroug-timelayer thicknessButyl rubber:≥480 min≥0,4mmNitrile rubber:≥480 min≥0,38mmNeoprene:≥240 min≥0,65mm

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

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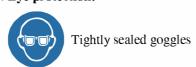
## Safety data sheet according to 1907/2006/EC, Article 31

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. Eye protection:



. Body protection: Protective work clothing

## **SECTION 9: Physical and chemical properties**

. 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Form: Fluid
Colour: Colourless

Odour: Recognisable

Odour threshold: Not determined.

. pH-value at 20  $^{\circ}$ C:  $\sim$ 11

. Change in condition

**Melting point/freezing point:** Undetermined. **Initial boiling point and boiling range:** >100 °C

. Flash point: Not applicable.

. Flammability (solid, gas): Not applicable.

. **Decomposition temperature:** Not determined.

. **Auto-ignition temperature:** Product is not selfigniting.

. **Explosive properties:** Product does not present an explosion hazard.

Not determined.

. Explosion limits: Lower:

Upper: Not determined.

. Vapour pressure: Not determined.

. Density at 20 °C: ~1.3 g/cm³

. Relative density
. Vapour density
. Evaporation rate
Not determined.
Not determined.
Not determined.

. Solubility in / Miscibility with

water: Fully miscible.

. Partition coefficient: n-octanol/water: Not determined.

. Viscosity:

**Dynamic:** Not determined. **Kinematic:** Not determined.

. Solvent content:

 Water:
 >50 %

 VOC (EC)
 0.00 %

 Solids content:
 0.0 %

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. 9.2 Other information

No further relevant information available.

### **SECTION 10: Stability and reactivity**

- . 10.1 Reactivity No further relevant information available.
- . 10.2 Chemical stability
- . Thermal decomposition / conditions to be avoided: Stable at environment temperature.
- . 10.3 Possibility of hazardous reactions Reacts with acids, alkalis and oxidising agents.
- . 10.4 Conditions to avoid No further relevant information available.
- . 10.5 Incompatible materials: Under certain fire conditions, traces of other toxic gases cannot be excluded.
- . 10.6 Hazardous decomposition products:

Nitrogen oxides (NOx)

Irritant gases/vapours

Carbon monoxide and carbon dioxide

## **SECTION 11: Toxicological information**

- . 11.1 Information on toxicological effects
- . Acute toxicity Based on available data, the classification criteria are not met.
- . LD/LC50 values relevant for classification:

#### 123-31-9 hydroquinone

Oral LD50 302 mg/kg (rat)

Dermal LD50 >2,000 mg/kg (rabbit)

#### 584-08-7 potassium carbonate

Oral LD50 >2,000 mg/kg (rat)

## 140-01-2 Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)

Oral LD50 >2,000 mg/kg (rat)

#### 1310-73-2 sodium hydroxide (caustic soda)

Oral LD50 >2,000 mg/kg (rat)

- . Primary irritant effect:
- . Skin corrosion/irritation

Causes skin irritation.

#### . Serious eye damage/irritation

Causes serious eye damage.

## . Respiratory or skin sensitisation

May cause an allergic skin reaction.

## . Acute effects (acute toxicity, irritation and corrosivity)

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

- . CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- . Germ cell mutagenicity

Suspected of causing genetic defects.

. Carcinogenicity

Suspected of causing cancer.

- . Reproductive toxicity Based on available data, the classification criteria are not met.
- . STOT-single exposure Based on available data, the classification criteria are not met.
- . **STOT-repeated exposure** Based on available data, the classification criteria are not met.

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. **Aspiration hazard** Based on available data, the classification criteria are not met.

### **SECTION 12: Ecological information**

- . 12.1 Toxicity
- . Aquatic toxicity:

### 123-31-9 hydroquinone

EC50 48 mg/l (daphnia magna (Water flea))

LC50 96 mg/l (fish: Pimephales promelas)

#### 140-01-2 Diethylenetriaminepentaacetic acid, pentasodium salt (DTPA-Na5)

EC50 48 mg/l (daphnia magna (Water flea))

48 mg/l (Invertebrates)

LC50 96 mg/l (fish)

96 mg/l (Lepomis macrochirus (Sonnenbarsch))

#### 1310-73-2 sodium hydroxide (caustic soda)

EC50 24 mg/l (daphnia magna (Water flea))

LC50 48 mg/l (Lepomis macrochirus (Sonnenbarsch))

96 mg/l (fish: Oncorhynchus mykiss)

- . 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.
- . Ecotoxical effects:
- . Remark: Very toxic for fish
- . Additional ecological information:
- . General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

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

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- . 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

09 01 01\* water-based developer and activator solutions

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

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

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14.1 UN-Number ADR, IMDG, IATA	UN3082
14.2 UN proper shipping name ADR	3082 ENVIRONMENTALLY HAZARDOU
IMDG IATA	SUBSTANCE, LIQUID, N.O.S. (hydroquinone) ENVIRONMENTALLY HAZARDOUS SUBSTANC LIQUID, N.O.S. (hydroquinone), MARIN POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANC
1011	LIQUID, N.O.S. (hydroquinone)
14.3 Transport hazard class(es)	
ADR Class Label	9 (M6) Miscellaneous dangerous substances and articles
IMDG, IATA Class Label	9 Miscellaneous dangerous substances and articles.
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards:	Product contains environmentally hazardous substance hydroquinone
Marine pollutant:  Special marking (ADR): Special marking (IATA):	Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances a articles.
Danger code (Kemler): EMS Number: Stowage Category	90 F-A,S-F A
14.7 Transport in bulk according to Anne Marpol and the IBC Code	ex II of Not applicable.
Transport/Additional information:	Due to special provision 375 ADR and chapter 2.10 IMDG this item does not need to be labeled as dangero goods.
ADR Excepted quantities (EQ)	Code: E1  Maximum net quantity per inner packaging: 30 ml  Maximum net quantity per outer packaging: 1000 ml
Transport category	3

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. IMDG . Excepted quantities (EQ)	Code: E1  Maximum net quantity per inner packaging: 30 ml  Maximum net quantity per outer packaging: 1000 ml
. UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HYDROQUINONE), 9, III

## **SECTION 15: Regulatory information**

- $.\ 15.1\ Safety, health\ and\ environmental\ regulations/legislation\ specific\ for\ the\ substance\ or\ mixture$
- . Labelling according to Regulation (EC) No 1272/2008 GHS label elements
- . REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- . 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

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.
- H360FD May damage fertility. May damage the unborn child.
- H361 Suspected of damaging fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- . Contact: Sales@fotospeed.com
- . 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)

ICAO: International Civil Aviation Organisation

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)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

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Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

Muta. 2: Germ cell mutagenicity – Category 2
Carc. 2: Carcinogenicity – Category 2
Repr. 1B: Reproductive toxicity – Category 1B
Repr. 2: Reproductive toxicity – Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

. \* Data compared to the previous version altered.