Film developer & fixer

Fine grain
All in one product

BERGGER ONE

1. Identification

Product identifier :	BERGGER ONE
Application :	Film Developer & Fixer
Supplier :	BERGGER SAS, Les plaines de Rejatas, 87260 Vicq-sur-Breuilh
Tél. :	09 66 89 50 26
Emergency (France) :	+33 (0)1 45 42 59 59

2. Hazards identification

Classification according to Regulation (EC) No 1272/2008

Muta. 2 H341 Suspected of causing genetic defects.
Carc. 2 H351 Suspected of causing cancer.
Eye Dam. 1 H318 Causes serious eye damage.
Aquatic Acute 1 H400 Very toxic to aquatic life.
Acute tox.3 H302 Harmful if swallowed.
Skin Corr. 1A H314 Causes severe skin burns and eye damage
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects

Hazard pictograms

Signal word

Danger

Hazard-determining components of labelling
Hydroquinone
Sodium Hydroxyde
Phenidone

Hazard statements

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Precautionary statements

P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash … thoroughly after handling.
P270 Do no eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin wash with plenty of soap and water.
P304+P340 If inhaled remove victim to fresh air and keep at rest in a position comfortable for breathing.
P301+P312 If swallowed call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338 If in eyes rinse cautiously with water for several minutes, Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 If exposed or concerned get medical advice/attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 – Rinse mouth.
P332+P313 If skin irritation occurs get medical advice/attention.
P337+P313 If eye irritation persists: get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/ international regulations.

3. Composition/information on ingredients

Mixtures

Mixture of the substances listed below with harmless additions.

Dangerous components		
CAS: 123-31-9 EINECS: 204-617-8 Index number: 604-005-00-4	**1,4-dihydroxybenzene (hydroquinone)** Muta. 2, H341; Carc. 2, H351 Eye Dam. 1, H318 Aquatic Acute 1, H400 Acute Tox. 4, H302; Skin Sens. 1, H317	**<10%**
CAS: 1310-73-2	**Sodium hydroxide** Skin Corr. 1A H314 Eya Dam. 1 H318	**<5%**
CAS : 92-43-3	**Phenidone** Acute tox.4 H302 Aquatic chronic.2 H411 Toxic to aquatic life with long lasting effects	**<5%**

4. First aid mesures

General information
Instantly remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 24 hours after the accident.

After inhalation Unlikely route of exposure as the product does not contain volatile substances. Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

After skin contact Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Contact physician if irritation continues.

After eye contact Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

After swallowing NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Remove victim immediately from source of exposure. Rinse mouth thoroughly. Drink a few glasses of water or milk. Provide rest, warmth and fresh air. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention.

5. Firefighting measures

Suitable extinguishing agents
CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
For safety reasons unsuitable extinguishing agents Water with a full water jet.

Special hazards arising from the substance or mixture Can be released in case of fire
Carbon monoxide

Advice for firefighters
Protective equipment
Do not inhale explosion gases or combustion gases.
Wear self-contained breathing apparatus.
Do not use a heavy water stream.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective clothing.
Avoid causing dust.

Environmental precautions:
Inform respective authorities in case product reaches water or sewage system.
Do not allow to enter drainage system, surface or ground water.

Methods and material for containment and cleaning up:
Dispose of contaminated material as waste according to item 13.

Reference to other sections
See Section 8 for information on personal protection equipment.

7. Handling and storage

Precautions for safe handling
Open and handle container with care.
Prevent formation of dust.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility:
Keep away from foodstuffs, beverages and food.

Further information about storage conditions:
Store in closed original container in a dry place. Store under well-ventilated conditions at a temperature below 25°C.

Storage class Chemical storage

Specific end use(s) No further relevant information available.

8. Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

Airborne Exposure Limits:

Not determinated

Exposure controls

General protective and hygienic measures
The usual precautionary measures should be adhered to general rules for handling chemicals.
Keep away from foodstuffs, beverages and food.
Take off immediately all contaminated clothing.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.

Personal protective equipment

Breathing equipment: Not required.

Protection of hands:
Protective gloves. The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374.
This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.
Only use chemical-protective gloves with CE-labelling of category III.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Penetration time of glove material
The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:
Synthetic gloves

Value for permeation: Level:
>= 3 (60 min)

Not suitable are gloves made of the following materials:
Natural rubber, NR

Eye protection: Tightly sealed safety glasses or face shield.

Body protection: Protective work clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties	
Appearance	
Form	Liquid
Colour	Colourless to brown
Odour	Not characteristic
pH Value at 20°C	?
Boiling point / Boiling Range	> 100°C
Ignition temperature	Not determinated
Self-inflammability	Product is not selfigniting.
Danger of explosion	Product is not explosive.
Density at 20°C	Not determinated
Solubility in / Miscibility with	
Water	Fully miscible
Solvent content	
ogranic solvents	0.0%
water	~ 80%
Other information	No further relevant information available.

10. Stability and reactivity

Reactivity

Chemical stability
Stable under the prescribed storage conditions. No particular stability concerns.

Possibility of hazardous reactions Reacts with strong acids. React with acids releasing Carbon dioxide

Conditions to avoid -

Hazardous decomposition products: -

11. Toxicological information

Information on toxicological effects
This chemical formulation has not been tested for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Acute toxicity **LD/LC50 values that are relevant for classification:**		
123-31-9 1,4-dihydroxybenzene (hydroquinone)		
Oral Dermal	LD50 LD50	320 mg/kg (rat) >900 mg/kg (rat)

12. Ecological informations

Toxicity

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

Aquatic toxicity (acute)		
123-31-9 1,4-dihydroxybenzene (hydroquinone)		
EC50/48 h IC50/72 h LC50/96 h	0.29 mg/l (Daphnia magna) 0.335 mg/l (Selenastrum capricornutum) 0.044 mg/l (Pimephales promelas)	
1310-73-2 Sodium Hydroxide		
EC50/48 h LC50/96 h	40,4 mg/l (aquatic invertebrates) <180 mg/l (fish)	

Aquatic toxicity (chronic)		
1310-73-2 Sodium Hydroxide		
EC50/15 min	22 mg/l (microorganisms)	
92-43-3 Phenidone		
LC50/96h EC50/48h EC50/72h EC50/15min	10 mg/l (Pimephales promelas) 6.25 mg/l (Daphnia magna) 9.249 mg/l (Chlorella Vulgaris) 3.02 mg/l (Photobacterium phosporeum)	

Persistence and degradability Not determined

Persistence and degradability Not determined

Bioaccumulative potential Not determined

Behaviour in environmental systems: Not determined

Mobility in soil No further relevant information available.

Ecotoxical effects: No further relevant information available.

Remark: Very toxic for fish

Other adverse effects No further relevant information available.

14. Transport information

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

15. Regulatory information

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

Water hazard class: highly water-endangering.

16. Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing data specification sheet:
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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
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

Sources
applicable EEC directives: 1907/2006, 1272/2008