

Developer SE 4 Neutral

1) substance-/ preparation and company name

Chemical name/ Trade name: SE4 NEUTRAL
Application/use: Photographic developer
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2) Hazards identification

contains hydroquinon
Xn harmful
MAY BE HARMFUL IF ABSORBED THROUGH SKIN, OR SWALLOWED
CAUSES SKIN AND EYE IRRITATION
MAY CAUSE ALLERGIC SKIN REACTION

3) composition/details on components

This product is a preparation according to the law for chemicals.
Description: Aqueous solution containing inorganic and organic substances

Name	Content	CAS	EINECS	CLASSIFICATION
1,4 DIHYDROXYBENZENE POTASSIUM SALT	5-10	21799-87-1	244-584-7	not classified
1,2-DIHYDROXYBENZENE (Hydrochinon)	1-5	123-31-9	204-617-8	Xn R-22, 40, 41, 43, 50, 68 Carc3 Mut3
POTASSIUM CARBONATE	8-12	584-08-7	209-529-3	Xn R-22, 36
DIETHYLENE GLYCOL		111-46-6	203-872-2	Xn R-22
POTASSIUM BROMIDE	>1	7758-02-3	231-830-3	Xn R-20/22, 36/37/38
1-PHENYL-4-METHYL-4-HYDROXYMETHYL-3 PYRAZOLIDONE	1-3	13047-13-7	235-920-3	Xn R-48/22
DIETHYLENTRIAMINE PENTAACETIC ACID NA5	1-5	67-43-6	200-652-8	Xi R-36
SODIUM SULPHITE	10-15	7757-83-7	231-821-4	not classified

Other information: further principal ingredient: Water

4) first aid precautions

General notes: change contaminated, wet clothing.
consult a doctor.
After breathing in: None of special precautions required.
After skin contact: at skin contact wash immediately with water and soap.
Wash clothing before reuse.
After eye contact: At eye contact open eyelids wash with water, then immediately consult an eye specialist.
Consult eye specialist at eye irritation.
After swallowing: Rinse out mouth with water and drink a lot of water afterwards

24 hour transportation emergency telephone number: Chemtrec 800-424-9300

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5) PRECAUTIONS for fire fighting

Suitable extinguishing agents: for security reasons	Coordinate extinguishing precautions on the surrounding fire. None confessed.
unsuitable extinguishing agents:	
Special endangerings of the substance or the product itself	released by fire can be : carbon monoxide, carbon dioxide
its waste products of combustion or arising gasses:	sulfur dioxide
Special protection equipment for fire fighting:	None of special equipment required.
Additional notes:	Product does not burn.

6) PRECAUTIONS at unintentional release

Person drawee	Use personal protective clothing.
Precautions:	
Environment protective measures:	Don't let it drain into the sewage system/surface water/ground water.
proceedings for cleaning/binding:	liquid binding materials (e.g. sand, pebble sand sawdust, universal binding agents).
Additional notes:	Treat the taken material according to waste management section.

7) handling and storage

Indications for safe contact:	At proper use none of special precautions required.
Points on fire-and explosion protection:	The product is not combustible.
Requirements on storerooms and containers:	None of special requirements necessary. Keep container tightly closed.
Together storage notes:	None of special precautions required.
More details on Storage conditions:	Recommended storage temperature: 10 to 25 C
Store class:	LGK 12 (VCI strategy)

8) outline demarcation and personal protection equipment

- **Additional information about design of technical systems: No further data; see item 7.**
- **Components with limit values that require monitoring at the workplace:**

123-31-9 1,4-dihydroxybenzene (hydroquinone)

MEL

OES

Long-term value: 0.5 mg/m³

Short-term value: 4 mg/m³

Long-term value: 2 mg/m³

CHAN, ILV

- **Additional information:** The lists that were valid during the compilation were used as basis.

· **Personal protective equipment**

· **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.

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Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

· **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

· **Material of gloves**

Nitrile rubber, NBR

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Chloroprene rubber, CR

Recommended thickness of the material: ≥ 0.5 mm

· **Penetration time of glove material**

Value for permeation: Level ≥ 6 (480 min)

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.

9) physical and chemical qualities

Form:	Liquid
Color:	Colourless or slightly yellow, clear.
Smell:	Odourless.
pH value:	10.85 (20 C)
Boiling-point/boiling area:	≥ 100 C
Melting point/glaze area:	≤ 0 C
Flaming point:	Not applicable.
Imflammable/	Not inflammable.
Catching light temperature:	
Self flammability:	Not self-flammable
Fire promoting	Not combustible.
qualities:	
Danger of explosion:	No danger of explosion.
Vapor pression:	Remark: Corresponds to the vapor pression of water.
Density:	1.150 g/ml (20 C)
Pouring density:	Not applicable.
Solubility into water:	Mixable.
in other solvents:	No relevant data.
Distribution coefficient	No relevant data.
n-Oktanöl/water:	
Dynamic viscosity:	no relevant data.

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other details: There are not further data.

10) stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions: No dangerous reactions known

Dangerous products of decomposition: No dangerous decomposition products known

11) details on toxicology

Toxicological tests:

Acute Toxicity: Details refer to the main component
hydroquinone LD 50, oral rat 320 mg/kg
**Specific symptoms in this
Animal experiment:** No relevant data.

Irritation-/ etching effect: The details refer to the technical active agents

Skin: slightly irritating
Eyes: strongly irritating
Sensitization: Sensitization of skin is possible.
Effect after repeated or longer continuous expose:
Possibility of irreversible damage if swallowed.

Cancer producing, ancestral estate changing

as well as propagation endangering: The preparation contains hydroquinone, a substance classified with category 3 producing cancer and changing ancestral estate
(Category 3: Substances, giving concern because of possible carcinogenic and ancestral estate changing effect on the man).

Other details: No further data.
Experiences from the practice: No relevant data.
General remarks: There are no toxicological data. The classification was carried out according the calculation proceedings of preparation guideline (88/379/EEC).

12) details on ecology

General notes: There are no data.
The product was not tested.
Remarks: Does not reach by correct use into the waste water.

13) indications for waste management

Product: The corresponding local water-and waste regulations must be observed. Do not dispose with domestic garbage.
Do not let it get into the sewage system.

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on the user whether the information is complete and suitable for his special use.

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R-PHRASES (FULL TEXT)

Not classified. R-22 Harmful if swallowed. R-36 Irritating to eyes. R-40 Limited evidence of a carcinogenic effect.. R-36/38 Irritating to eyes and skin. R-48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.