

## Developer SE 20C Catechol

### 1) substance-/ preparation and company name

**Chemical name/ Trade name:** SE20c CATECHOL

**Application/use:** Photographic developer  
**Company name:** Wolfgang Moersch Photochemie, Am Heideberg 48

D 50354 Hürth, Germany

**Telephone:** ++49 22 33 943137

### 2) 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	4-8%	21799-87-1	244-584-7	not classified
1,2-DIHYDROXYBENZENE (Catechol)	1-5%	120-80-9	204-427-5	Xn R21/22 36/38
1,4-DIHYDROXYBENZENE (Hydrochinone)	1-5%	123-31-9	204-617-8	Xn R-22, 40, 41, 43, 50, 68 Carc3 Mut3
POTASSIUM CARBONATE	9-13%	584-08-7	209-529-3	Xn R-22, 36
DIETHYLENE GLYCOL	>1%	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
BENZOTRIAZOLE	>1%	95-14-7	202-394-1	Xn R-22, 36
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	9-15%	7757-83-7	231-821-4	not classified
TRIETHANOLAMINE	5-10%	102-71-6	203-049-8	not classified

**Other information:** further principal ingredient: Water

### 3) Possible risks

**Definition of dangers:** Bad for health: Possibility of irreversible damage if swallowed. Danger of serious eye damage. Sensitization by skin contact possible.

### 4) first aid pecautions

**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

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

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### 6) PRECAUTIONS at unintentional release

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

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### 7) handling and storage

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

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### 8) outline demarcation and personal protection equipment

<b>Additional indications for arrangement of technical plants:</b>	See section 7; no requirements going beyond this.
<b>Personal protection equipment:</b>	
<b>Breathing protection:</b>	Sufficient ventilation, no additional protection necessary.
<b>Hand protection:</b>	Gloves. Required qualities: Liquid proof.

### 9) physical and chemical qualities

<b>Form:</b>	Liquid
<b>Color:</b>	Colourless, clear.
<b>Smell:</b>	Odourless.
<b>pH value:</b>	<b>11.05</b> (20 C)
<b>Boiling-point/boiling area:</b>	≥ 100 C
<b>Melting point/glaze area:</b>	≤ 0 C
<b>Flaming point:</b>	Not applicable.
<b>Imflammatoriy/</b>	Not inflammable.

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**Catching light temperature:**

**Self flammability:** Not self-flammable

**Fire promoting qualities:** Not combustible.

**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-Oktanol/water:**

**Dynamic viscosity:** no relevant data.

**other details:** There are not further data.

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### 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:** Catechol

**Animal experiment:** **LD50 (oral rat): 260mg/kg**  
**LD50 (skin rabbit): 800mg/kg**

**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.

**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).

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### 12) details on ecology

There are no data.

**General notes:** The product was not tested.

Remarks: Does not reach by correct use into the waste water.

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### 13) indications for waste management

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<b>Product:</b>	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.
<b>European waste catalog:</b>	09 00 00: Waste from the photographic industry 09 01 00: Waste from the photographic industry 09 01 01: Developer and activators on water base Not contaminated packings can be recycled .
<b>Packing:</b>	Empty packing completely, wash well (Cleaning agent: water), can be recycled afterwards

### 14) transport information

<b>ADR CLASS:</b>	Not classified for transportation.
<b>ROAD TRANSPORT NOTES:</b>	Not classified for road transport
<b>RAIL TRANSPORT NOTES:</b>	Not classified for rail transport
<b>SEA TRANSPORT NOTES:</b>	Not classified for sea transport
<b>AIR TRANSPORT NOTES:</b>	Not classified for air transport

### 15) regulations

**Identification by EC directives:** The product is classified and labeled according to EC guidelines ( GefStoffVO)

<b>Classification letter:</b>	Xi	danger symbol:	
<b>Danger identification:</b>	Bad for health		
<b>R sentences:</b>	<b>R-36 Irritating to eyes.</b> <b>R-40 Limited evidence of a carcinogenic effect.</b> <b>R-43 May cause sensitisation by skin contact.</b> <b>R-68 Possible risk of irreversible effects.</b>		

<b>S sentences:</b>	<b>S-2 Keep out of reach of children.</b> <b>S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</b> <b>S-36/37 Wear suitable protective clothing and gloves. S-46 If swallowed seek medical advice immediately and show this container label.</b>
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**Remarks:** This classification was carried out according to the calculation method for preparations guideline ( 88/379/EEC).

#### Special identification-regulations for definite Preparations:

**National regulations:** is allotted

**Occupation - restrictions:** Occupation restrictions for being and staunching mothers take into account (§ 5 MuSchuRiV).

**Disruptive incident prescription :** the disruptive incident isn't subject.

**Prescription about combustible liquids:** It is not subject to this prescription.

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<b>Technical instructions air:</b>	This TA isn't a subject.
<b>Water endangering class (WGK):</b>	2 (water endangering) (Classification in accordance with VwVwS, appendix 4)
<b>Other regulations, restrictions and Ban prescriptions:</b>	is allotted

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### 16). other details

**Use:** Photographic developer

#### Further information:

These details refer merely on this above product and not needs to be valid, if this is occurred with another product or in an arbitrary process.

The information corresponds to our today's knowledge, it is correct and complete and with best conscience, given without a guarantee, though. It shall describe our product with a view to safety requirements and has therefore not the meaning to assure of certain qualities. The responsibility of the use of this product remains on the user whether the information is complete and suitable for his special use.

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### R-PHRASES (FULL TEXT)

R-22 Harmful if swallowed. R-36/38 Irritating to eyes and skin. R-40 Limited evidence of a carcinogenic effect. R-48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.