

EC safetydata sheet

According to 91/155/EWG



Developer Easy Lith Part A

EC SAFETY DATA SHEETS ACCORDING TO 91/155/EWG

DEVELOPER EASY LITH PART A

1) substance-/ preparation and company name

Chemical name/ EASY LITH part A Lith developer
Trade name:
Application/use: Photographic developer
Company name: Wolfgang Moersch Photochemie GbR, Am Heideberg 48
D 50354 Hürth
Telephone: ++49 22 33 40 18 85

2) composition/details on components

This product is a preparation according to the law for chemicals.

Description:

Aqueous solution containing inorganic and organic substances

Composition/information about the components:

| Name | Weight % | CAS no. | One EC number no. | EC index no. | Danger symbol; Danger notes |
|---------------------------|----------|-------------------------------------|-------------------|--------------|--------------------------------|
| hydroquinone | 10-15 | 123-31-9 | 204-617-8 | 604-005-00-4 | Xn, N; R 22-40-41-43 50 |
| diethylene glycol | 25-30 | 111-46-6 | 203-872-2 | | |
| 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.

Special danger notes for man and environment:

The preparation contains hydroquinone, a substance classified with category 3 producing cancer and changing genetic ancestral estate. (Category 3: Substances, which because of possible carcinogenic effect on the man give reasons for concern upon which sufficient information for a satisfying judgment is given or substances which because of changing ancestral estate give reason for a concern.

These dangers can occur if these substances are taken in.

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.

After swallowing:

Consult eye specialist at eye irritation.

Rinse out mouth with water and drink a lot of water afterwards

Developer Easy Lith Part A

Notes for the doctor: Don't start any vomiting. Consult doctor.

Symptoms: No symptoms confessed till now.

5) PRECAUTIONS for fire fighting

Suitable extinguishing agents: Coordinate extinguishing precautions on the surrounding fire.
for security reasons None confessed.
unsuitable extinguishing agents:
Special endangerings of released by fire can be : carbon monoxide, carbon dioxide
the substance or the product itself
its waste products of combustion or
arising gasses: sulfur dioxide
Special protection equipment None of special equipment required.
for fire fighting:
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: 5 to 25 C
Store class: LGK 12 (VCI strategy)

8) outline demarcation and personal protection equipment

Additional indications for arrangement of technical plants: See section 7; no requirements going beyond this.
Components to be superwised in connection of the working place and limiting values 111-46-6 diethylenglykol MAK 44 mg/m³
10 ml/m³
Personal protection equipment:
Breathing protection: Sufficient ventilation, no additional protection necessary.
Hand protection: Gloves. Required qualities: Liquid proof.

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| | |
|---------------------------|---|
| Eye protection: | Safety goggles. |
| Object protection: | personal protective clothing |
| Protection-and | Do not eat, drink, smoke sneeze while working. Wash hands at interruptions |
| Hygiene measures: | and work end. |

9) physical and chemical qualities

| | |
|------------------------------------|---|
| Form: | Liquid |
| Color: | slightly yellow, clear. |
| Smell: | Odorless. |
| pH value: | 5.5 (25 C) |
| Boiling-point/boiling area: | ≥ 100 C |
| Melting point/glaze area: | ≤ 0 C |
| Flaming point: | Not applicable. |
| Imflammatory/ | 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: | 1.090 g/cm ³ (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. |
| Solving average salary: | 21% water, 26% organic solvents (diethylenglykol) |
| Solid salary: | 16% |
| other details: | There are not further data. |

10) stability and reactivity

| | |
|-------------------------|--|
| Stability: | No decomposition by coorrect use. |
| Conditions | Contact with strong alkalies |
| to be avoided: | |
| Avoiding | Reaction with strong alkalies |
| Substances: | |
| Dangerous | None confessed. |
| Educts: | |
| Further details: | No dangerous reactions at prescribed storage and handling. |

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 | No relevant data. |
| Animal experiment: | |



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| | |
|--|--|
| Irritation-/ etching effect: | The details refer to the technical active agents (Hydroquinone, //10-15 % ig//) |
| 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. |
| European waste catalog: | 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 |
| Packing: | Not contaminated packings can be recycled . Empty packing completely, wash well (Cleaning agent: water), can be recycled afterwards |

14) details on transport

| | |
|-----------------------------------|---|
| Transport/further details: | No dangerous goods according to transport regulations (ADR/RID IMDG code, ICAO-TI/IATA-DGR) |
|-----------------------------------|---|

15) regulations

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

Developer Easy Lith Part B

EC SAFETY DATA SHEET ACCORDING TO 91/155/EWG

1). substance-/ preparation and company name

Chemical name/ Easy Lith part B
Trade name:
Application/use: Photographic developer
Company name: Wolfgang Moersch Photochemie, Am Heideberg 48
D 50354 Hürth
Telephone: ++49 22 33 40 18 85

2). composition/details on components

This product is a preparation according to the chemical law.

Description:

Aqueous solution containing inorganic and organic substances

Composition/information about the components:

| Name | Weight % | CAS no. | One EC number no. | EC index no. | Danger symbol; Danger notes |
|---------------------|----------|----------|-------------------|--------------|--------------------------------|
| Potassium carbonate | 30-40 | 584-08-7 | 209-529-3 | | Xn; R: 22-36/37/38 |

Other information: Principal ingredient: Water

3). possible risks

Name of the dangers: Irritating: Irritates the eyes and the skin.
Special danger notes No dangers to be mentioned particularly. Please, take the information
Man and environment: of this safety data sheet into account.

4). FIRST AID PRECAUTIONS

General notes: change contaminated clothing.
Consult a doctor.

After breathing in: No of special measures required.
At continuing troubles: obtain medical advice.

After skin contact: Wash skin immediately at touch with water and soap.
Wash clothing in front of reuse.

After eye contact: At eye contact, open eyelids then immediately wash with sufficient
water.
Consult a doctor.
Consult eye specialist at eye irritation.

After swallowing: Rinse out mouth and drink a lot of water.
Don't start any vomiting. Consult a doctor.

Notes for the doctor:
Symptoms: No symptoms confessed till now.

5). PRECAUTIONS at fire fighting

Suitable extinguishing agents: Coordinate extinguishing measures on surroundings fire.
Security reasons due to None confessed.

Developer Easy Lith Part B

unsuitable extinguishing agents:
Special endangerings due to the substance or the product itself its waste products of combustion or arising gasses: Released at fire: Carbon monoxide, carbon dioxide
Sulfur dioxide.
Special protection equipment the fire fighting: None of special measures required.
Additional notes: Product doesn't burn.

6). PRECAUTIONS at unintentional release

Person drawee Use personal protective clothing.
Precautions:
Environment protective measures: Don't let it get into the sewage system/surface water/ground water

Proceedings on cleaning and binding: Use liquid binding compounds like sawdust, universal binding agent

Additional notes: The taken material has to be treated according to section waste management

7). handling and storage

Indications for safe contact: Use only in well ventilated areas.
Points on fire-and Explosion protection: The product is not combustible.
Requirements on storerooms and container: None of special requests necessary. Container, thick, keep locked.
Together storage notes: None of special measures required.
More details to Storage conditions: Recommended storage temperature: 5 to 25 C
Store class: LGK 12 (VCI strategy)

8). outline demarcation and personal protection equipment

Additional indications for arrangement of technical plants: See section 7; no measures going beyond this required.

Components to be supervised in connection of the working place and limiting values

Personal protection equipment:

Breathing protection: Sufficient ventilation.
Hand protection: Gloves. Required qualities: Liquid proof, thick.
Eye protection: Safety goggles (basket glasses.)
Object protection: Personal protective clothing.
Protection-and Hygiene measures: Do not eat, drink or smoke at work.
Preventive skin protection. Wash hands before breaks and at work end. Use fatty skin cremes after cleaning.

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9). physical and chemical qualities

| | |
|--|---|
| Form: | Liquid |
| Color: | Yellow, clear. |
| Smell: | Odorless. |
| pH value: | 12.3 (25 C) |
| Boiling-point/boiling area: | ≥ 100 C |
| Melting point/glaze area: | ≤ 0 C |
| Flaming point: | Not applicable. |
| Imflamatory/ Catching light temperature: | Not inflammable. |
| Self flammability: | Not self flammable. |
| Fire promoting Qualities: | Not combustible. |
| Danger of explosion: | Not explosion dangered. |
| Vapor pression: | Remark: Corresponds to the vapor pression of water. |
| Density: | 1.500 g/cm ³ (20 C) |
| Pouring density: | Not applicable. |
| Solubility in water: | Mixable. |
| in other solvents: | There are no data. |
| Distribution coefficient n-Oktanol/water: | There are no data. |
| Dynamic viscosity: | There are no data. |
| Solving average salary: | 41% water |
| Solid salary: | 59% |
| other details: | There are not further data. |

10). stability and reactivity

| | |
|----------------------------------|--|
| Stability: | No decomposition by correct use. |
| Conditions to be avoided | Contact with strong acids. |
| Substances to be avoided: | Reaction with strong acids. |
| Dangerous Educts: | None confessed. |
| Further details: | No dangerous reactions at prescribed storage and handling. |

11). details on toxicology

| | |
|---|---|
| Toxikological exams: | |
| Acute Toxicity: | Details refer to the main components caliumcarbonate LD 50 oral rat 1870 mg/kg |
| Specific symptoms in this Animal experiment: | There are no data. |
| Irritation-/ etching effect: | |
| Skin: | Slight Irritation effect. |
| Eyes: | Irritating. |
| Sensitization: | There are no data. |
| Effect after repeated or longer continuous expose: | None confessed. |

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Cancer producing, ancestral estate changing as well as propagation endangering:

None confessed.

Other details:

No further data.

Experiences from the practice:

There are no data.

General remarks:

There are no toxicological data. This classification is prepared according to the calculation proceedings of the preparation

guideline

(88/379/EEC).

12). details on ecology

General notes:

There are no data.

The product was not checked.

Remarks: Does ,by correct use ,not get into the sewage system.

13). indications for waste management

Product:

The corresponding legal local-and waste regulations must be observed. May not be together disposed with domestic garbage. Do not let it reach into the

sewage

system

European waste catalog:

09 00 00: Waste from the photographic industry

09 01 00: Waste from the photographic industry

09 01 01: Developer and activators gates on water base

Packing:

Not contaminated packages can be recycled

Empty completely, wash contaminated packages well

(Cleaning agent: water), can be recycled afterwards.

14). details on transport

Transport/further details:

No dangerous goods according to transport regulations (ADR/RID IMDG code, ICAO-TI/IATA-DGR)

15). Regulations

Identification

The product is/classified and labeled according to EC guidelines(GefStoffVO)

by EC directives:

Classification letter:

Xi

danger symbol:



Danger name:

irritating

R sentences:

36/38

S sentences:

26

Remarks: the classification is carried out according to the calculation method for preparations guideline (88/379/EEC).

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Special identification-

regulations for definite

Preparations: is allotted

National regulations:

Occupation - No restrictions.

restrictions:

Disruptive incident prescription (StörfallV): the (Disruptive incident) isn't subject.

Prescription about combustible Is no subject for this prescription.

Liquids:

Technical instructions air: This (TA) isn't subject.

Water endangering class: 1 (weakly water endangering)
(Classification in accordance with VwVwS, appendix 4)

(WGK)

Other regulations, restrictions and

Ban prescriptions: is dropped

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.

ISSUED BY:

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REVISION DATE:

2009-07-07

PRINTING DATE

2009-07-07

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

EC safetydata sheet

According to 91/155/EWG

Developer SE5 Lith Part D

1). substance-/ preparation and company name

| | |
|-------------------------|--|
| Chemical name/ | SE5 Lith part D Lith developer |
| Trade name: | |
| Application/use: | Photographic developer |
| Company name: | Wolfgang Moersch Photochemie, Am Heideberg 48 D 50354 Hürth |
| Telephone: | ++49 22 33 943137 |

2). composition/details on components

This product is a preparation according to the chemical law.

Description: Aqueous solution containing mainly inorganic substances

Composition/information about the components:

| Name | Weight % |
|--------------------------|------------------|
| Danger symbol: - | |
| Potassium bromide | 30 - 40 |
| Nitroindazole | 0,1 - 0,5 |

Danger notes

Other information: Principal ingredient: water, potassium bromide

3). Possible risks

Name of dangers: No identification required. Please, take the information of this safety data sheet this one into account.

Special danger notes on Man and environment:

No dangers to be mentioned particularly.

4). first aid PRECAUTIONS

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

Notes for the doctor:

Symptoms: No symptoms confessed till now.

5). PRECAUTIONS on fire fighting

Suitable extinguishing agents: Coordinate extinguishing measures on surroundings fire.

From security reasons None confessed.

unsuitable extinguishing agents:

Special endangerings of Possible releases by fire: Bromine vapors

**the substance or the product itself
its waste products of combustion or**

arising gasses:

Special protection equipment Compressed air breathing apparatuses allowed if the material burns

the fire fighting: use.

Additional notes: None.

6). PRECAUTIONS at unintentional release

Person drawee Use personal protective clothing.

Precautions:

Environment protective measures: Do not let it get into the sewage system/surface water/ground water

Proceedings on cleaning and binding: Use liquid binding compounds like sawdust, universal binding agent

Additional notes: The taken material according to section waste management treat.

7). handling and storage

Indications for safe contact: -

Points on fire-and The product is not combustible.

Explosion protection:

Requirements on storerooms None of special requests necessary. Container, thick, and container: keep locked.

Together storage notes: None of special measures required.

More details on Recommended storage temperature: 5 to 25 C

Storage conditions:

Store class: LGK 12 (VCI strategy)

8). outline demarcation and personal protection equipment

Additional indications for the See section 7; no measures going beyond this

Lay-out of technical plants: required.

**Components to be
superwised in connection with**

the working place and

limiting values: No-one

Personal protection equipment:

Breathing protection: Sufficient ventilation, no additional protection necessary.
Hand protection: Gloves. Required qualities: Liquid thick.

Eye protection: Safety goggles (basket glasses).

Object protection: personal protective clothing

Protection-and Do not eat, drink or sneeze at work.

Hygiene measures: Preventive skin protection. Wash hands before the breaks

and

at work end

Use fatty skin cremes after use

9). physical and chemical qualities

Form: Liquid
Color: Yellow, clear.
Smell: Not characteristic.
pH value: 10.6 (22 C)

Boiling-point/boiling area: ≥ 100 C

Melting point/glaze area: ≤ 0 C

Flaming point: Not applicable

Imflammatory/ Not inflammable.

Catching light temperature:

Self-flammable: Not self flammable.

Fire promoting Not combustible.

Qualities:

Danger of explosion: Not explosion dangerous.

Vapor pression: Remark: Corresponds to the vapor pression of water.

Density: 1.274 g/cm³ (20 C)

Pouring density: Not applicable.

Solubility into waters: Mixable.

in other solvents: There are no data.

Distribution coefficient There are no data.

n-Oktanol/water:

Dynamic viscosity: There are no data.

Solving average salary: 69% water

Solid salary: 31%

other details: There are no further data.

10). stability and reactivity

Stability: No decomposition at correct use.

Avoiding Contact with acids.

Conditions:

Avoiding Reaction with acids (formation) of bromine hydrogene.

Substances:

Dangerous Only at fire (temperature 750 C) dangerous
Educts: Bromine vapors can arise (see section 5).
Further details: No dangerous reactions at prescribed storage and Handling.

11). details on the toxicology

Toxicological exams:

Acute Toxicity: None confessed.

:

Irritation-/ etching effect:

Skin: Slight Irritation effect.

Eyes: Irritation effect.

Sensitization: There are no data.

Effects after repeated or longer, continuous expose:

None confessed.

Cancer producing, ancestral estate changing as well as propagation endangering qualities:

None confessed.

Other details: No further data.

Experiences from the practice: There are no data.

General remarks: There are no Toxicological data. The classification was carried out according to 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 ,at correct use,
into the sewage.

13). indications for waste management

Product: The corresponding legal local-and waste regulations must be observed. May not be together disposed with domestic garbage. Do not let it reach into the
sewage system

European waste catalog: 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

Packing: Not contaminated packages can be recycled
Empty completely, wash contaminated packages well
(Cleaning agent: water), can be recycled afterwards
being a reuse supplied.

14). details on transport

Transport/further details: No dangerous goods according to the transport regulations
(ADR/RID IMDG code, ICAO-TI/IATA-DGR)

15). Regulations Identification No identification required.

to EC directives: Is allotted.

Classification letter: Is allotted.

Danger symbol: Is allotted.

Danger name: Is allotted.

R sentences: Is allotted.

S sentences: Is allotted.

Remarks: the classification was carried out according to the calculation method preparation guideline (88/379/EEC)

Special identification-regulations for definite Preparations: Is allotted.

National regulations:

Occupation - restrictions: No-one

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

Prescription about combustible Is not subject to this prescription.

Liquids:

Technical instructions air: The (TA) isn't subject.

Water endangering class: 1 (water endangering weakly)

(WGK) (Classification in accordance with VwVwS, appendix 4)

Other regulations, restrictions and Ban prescriptions: is allotted

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.

ISSUED BY: Wolfgang Moersch – Moersch-Photochemie
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REVISION DATE: 28 Jun 2007
PRINTING DATE 02 May 1995

Developer SIENA Additive Carbonat

1) substance-/ preparation and company name

Chemical name/ Trade name: Polychrome Additiv Carbonat

Application/use: Photographic developer

Company name: Wolfgang Moersch Photochemie, Am Heideberg 48
D 50354 Hürth, Germany

Telephone: ++49 22 33 943137

2) Hazards identification

HARMFUL IF SWALLOWED
MAY CAUSE EYE IRRITATION

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 |
|---------------------|---------|----------|-----------|----------------|
| POTASSIUM CARBONATE | 10-20% | 584-08-7 | 209-529-3 | R-22, 36 |

Other information: further principal ingredient: Water

4) first aid precautions

General notes: change contaminated, wet clothing.

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

5) PRECAUTIONS for fire fighting

Suitable extinguishing agents: Coordinate extinguishing precautions on the surrounding fire.
for security reasons None confessed.

unsuitable extinguishing agents: None confessed

Special endangerings of

Special protection equipment None of special equipment required.

for fire fighting:

Additional notes: Product does not burn.

6) PRECAUTIONS at unintentional release

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

Developer SIENA Additive Carbonat

| | |
|--|--|
| 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: 5 to 25 C |
| Store class: | LGK 12 (VCI strategy) |

8) outline demarcation and personal protection 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.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

Breathing equipment: Not required.

Protection of hands: Not required

Eye protection: Tightly sealed safety glasses.

9) physical and chemical qualities

| | |
|------------------------------------|---|
| Form: | Liquid |
| Color: | Colourless, clear. |
| Smell: | Odourless |
| pH value: | 11.3 (20 C) |
| Boiling-point/boiling area: | ≥ 100 C |
| Melting point/glaze area: | ≤ 0 C |
| Flaming point: | Not applicable. |
| Imflammatoriy/ | Not inflammable. |
| 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: | 1.09 g/ml (20 C) |
| Pouring density: | Not applicable. |

Developer SIENA Additive Carbonat

| | |
|---------------------------------|-----------------------------|
| Solubility into water: | Mixable. |
| in other solvents: | No relevant data. |
| Distribution coefficient | No relevant data. |
| Dynamic viscosity: | no relevant data. |
| 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

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

Skin:

-

Eyes:

irritating

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).

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.

European waste catalog:

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

Packing:

Empty packing completely, wash well
(Cleaning agent: water), can be recycled afterwards

14) details on transport

Transport/further details:

No dangerous goods according to transport regulations
(ADR/RID IMDG code, ICAO-TI/IATA-DGR)

Developer SIENA Additive Carbonat

15) regulations

| | | |
|---|---|----------------------------|
| Identification by EC directives: | The product is classified and labeled according to EC guidelines (GefStoffVO) | |
| Classification letter: | none | Danger symbol: none |
| Danger identification: | none | |
| R sentences: | R22, R36 | |
| | | |
| S sentences: | S-2 Keep out of reach of children. | |
| | | |
| Remarks: | This classification was carried out according to the calculation method for preparations guideline (88/379/EEC). | |
| | | |
| Technical instructions air: | This TA isn't a subject. | |
| Water endangering class (WGK): | 1 (water endangering) (Classification in accordance with VwVwS, appendix 4) | |

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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REVISION DATE: **08 SEPT 2008**
PRINTING DATE **11 NOV 1998**

Developer SIENA Additive Chloride

1) substance-/ preparation and company name

Chemical name/ Trade name: Polychrome Additiv Ammonium Chlorid

Application/use: Photographic developer

Company name: Wolfgang Moersch Photochemie, Am Heideberg 48
D 50354 Hürth, Germany

Telephone: ++49 22 33 943137

2) Hazards identification

HARMFUL IF SWALLOWED
MAY CAUSE EYE IRRITATION

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 |
|-------------------|---------|------------|-----------|----------------|
| Ammonium chloride | 20-30% | 12125-02-9 | 235-186-4 | R22, R36 |

Other information: further principal ingredient: Water

4) first aid precautions

General notes: change contaminated, wet clothing.

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

5) PRECAUTIONS for fire fighting

Suitable extinguishing agents: Coordinate extinguishing precautions on the surrounding fire.
for security reasons None confessed.

unsuitable extinguishing agents: None confessed

Special endangerings of

Special protection equipment None of special equipment required.

for fire fighting:

Additional notes: Product does not burn.

6) PRECAUTIONS at unintentional release

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

Developer SIENA Additive Chloride

| | |
|--|--|
| 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: 5 to 25 C |
| Store class: | LGK 12 (VCI strategy) |

8) outline demarcation and personal protection 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.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

Breathing equipment: Not required.

Protection of hands: Not required

Eye protection: Tightly sealed safety glasses.

9) physical and chemical qualities

| | |
|------------------------------------|---|
| Form: | Liquid |
| Color: | Colourless, clear. |
| Smell: | ammonia |
| pH value: | 7.5 (20 C) |
| Boiling-point/boiling area: | ≥ 100 C |
| Melting point/glaze area: | ≤ 0 C |
| Flaming point: | Not applicable. |
| Imflammatory/ | Not inflammable. |
| 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: | 1.08 g/ml (20 C) |
| Pouring density: | Not applicable. |

Developer SIENA Additive Chloride

| | |
|---------------------------------|-----------------------------|
| Solubility into water: | Mixable. |
| in other solvents: | No relevant data. |
| Distribution coefficient | No relevant data. |
| Dynamic viscosity: | no relevant data. |
| 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

| | |
|---|---|
| Irritation-/ etching effect: | The details refer to the technical active agents |
| Skin: | slightly irritating |
| Eyes: | irritating |
| 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). |

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. |
| European waste catalog: | 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 |
| Packing: | Empty packing completely, wash well (Cleaning agent: water), can be recycled afterwards |

14) details on transport

| | |
|-----------------------------------|--|
| Transport/further details: | No dangerous goods according to transport regulations (ADR/RID IMDG code, ICAO-TI/IATA-DGR) |
|-----------------------------------|--|

15) regulations

Developer SIENA Additive Chloride

| | | |
|---|---|----------------------------|
| Identification by EC directives: | The product is classified and labeled according to EC guidelines (GefStoffVO) | |
| Classification letter: | none | Danger symbol: none |
| Danger identification: | harmful | |
| R sentences: | R22, R36 | |
| S sentences: | S-2 Keep out of reach of children. | |
| | | |
| Remarks: | This classification was carried out according to the calculation method for preparations guideline (88/379/EEC). | |
| | | |
| Technical instructions air: | This TA isn't a subject. | |
| Water endangering class (WGK): | 1 (water endangering) (Classification in accordance with VwVwS, appendix 4) | |

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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REVISION DATE: **08 SEPT 2008**
PRINTING DATE **11 NOV 1998**

Developer SIENA

1) substance-/ preparation and company name

Chemical name/ Trade name: SIENA

Application/use: Photographic developer

Company name: Wolfgang Moersch Photochemie, Am Heideberg 48
D 50354 Hürth, Germany

Telephone: ++49 22 33 943137

2) Hazards identification

MAY BE HARMFUL IF ABSORBED THROUGH SKIN, OR SWALLOWED
MAY CAUSE 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 |
|--|---------|-----------|-----------|----------------|
| N-4-HYDROXYPHENYLGLYCINE | 10-20% | 122-87-2 | 204-580-8 | not classified |
| DIETHYLENTRIAMINE PENTAACETIC ACID NA5 | >0,5% | 67-43-6 | 200-652-8 | Xi R-36 |
| SODIUM SULPHITE | 5-10% | 7757-83-7 | 231-821-4 | not classified |

Other information: further principal ingredient: Water

4) first aid precautions

General notes: change contaminated, wet clothing.

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

5) PRECAUTIONS for fire fighting

Suitable extinguishing agents: Coordinate extinguishing precautions on the surrounding fire.
for security reasons None confessed.

unsuitable extinguishing agents:

Special endangerings of None confessed

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

Developer SIENA

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: 5 to 25 C
Store class: LGK 12 (VCI strategy)

8) outline demarcation and personal protection 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.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.
Breathing equipment: Not required.
Protection of hands: Not required
Eye protection: Tightly sealed safety glasses.

9) physical and chemical qualities

Form: Liquid
Color: Colourless, clear.
Smell: Odourless.
pH value: 7.8 (20 C)
Boiling-point/boiling area: ≥ 100 C
Melting point/glaze area: ≤ 0 C
Flaming point: Not applicable.
Imflammatory/ Not inflammable.
Catching light temperature:
Self flammability: Not self-flammable

Developer SIENA

| | |
|----------------------------------|---|
| Fire promoting qualities: | Not combustible. |
| Danger of explosion: | No danger of explosion. |
| Vapor pression: | Remark: Corresponds to the vapor pression of water. |
| Density: | 1.14 g/ml (20 C) |
| Pouring density: | Not applicable. |
| Solubility into water: | Mixable. |
| in other solvents: | No relevant data. |
| Distribution coefficient | No relevant data. |
| Dynamic viscosity: | no relevant data. |
| 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

| | |
|---|---|
| Irritation-/ etching effect: | The details refer to the technical active agents |
| Skin: | slightly irritating |
| Eyes: | 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). |

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. |
| European waste catalog: | 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 |
| Packing: | Not contaminated packings can be recycled . Empty packing completely, wash well (Cleaning agent: water), can be recycled afterwards |

Developer SIENA

14) details on transport

Transport/further details: No dangerous goods according to transport regulations
(ADR/RID IMDG code, ICAO-TI/IATA-DGR)

15) regulations

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

Classification letter: none **Danger symbol:** none

Danger identification: harmful

R sentences: -

S sentences: **S-2 Keep out of reach of children.**
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-46 If swallowed seek medical advice immediately and show this container label.

Remarks: This classification was carried out according to the calculation method for preparations guideline (88/379/EEC).

Technical instructions air: This TA isn't a subject.
Water endangering class (WGK): 1 (water endangering)
(Classification in accordance with VwVwS, appendix 4)

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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REVISION DATE: 03 FEB 2002
PRINTING DATE 11 NOV 1998