

**1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Chemical name/ Trade name:** **MT2 CARBON**

**Application/use:** Photographic toner

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

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

**Helth Emergency Phone:** ++49 22 33 943137

**2 HAZARDS IDENTIFICATION**

**CONTAINS: Sodium Sulfide**

**DANGER!**

**CONTACT WITH ACID LIBERATES FLAMMABLE AND POISONOUS GAS**

**CAUSES SKIN AND EYE BURNS**

**DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT**

**HARMFUL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED**

**NFPA Hazard Ratings:** Health - 3, Flammability - 1, Instability - 0

NOTE: NFPA 704 (2001) hazard indexes involves data review and interpretation that may vary among companies. It is intended only for rapid, general identification of the magnitude of the potential hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

**3 COMPOSITION/INFORMATION ON INGREDIENTS**

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

Description: Aqueous solution containing inorganic and organic substances

Name	Content	CAS	EINECS	CLASSIFICATION
SODIUM SULFIDE	10-15	27610-45-3	215-211-5	T, N;R-23/25-33-50/53
SODIUM SULFITE	10-15	7757-83-7	231-821-4	not classified
SODIUM SELENITE	>1%	10102-18-8	233-267-9	T, N;R-23/25-33-50/53

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

**4 FIRST-AID MEASURES**

**Inhalation:** If inhaled, move to fresh air. Get medical attention.

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

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.

**Skin:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes.

**Ingestion:** If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious

person. Call a physician or poison control center immediately.

**Notes to physician:**

**Treatment:** Strong alkalis bind tissue protein. Following initial flushing of the eye with water, continued irrigation of the eye with saline is recommended. Treatment should be continued until pH of tears reaches neutral

## 5 FIRE-FIGHTING MEASURES

**Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special Fire-Fighting Procedures:** Wear self-contained breathing apparatus and protective suit. Fire or excessive heat may produce hazardous decomposition products.

**Hazardous Combustion Products:** Carbon oxides, sulphur oxides, (see also Hazardous Decomposition Products section).

**Unusual Fire and Explosion Hazards:** None.

## 6 ACCIDENTAL RELEASE MEASURES

**Methods for cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

## 7 HANDLING AND STORAGE

**Personal precautions:** Do not breathe vapours or spray mist. Keep container tightly closed. Do not get in eyes and avoid contact with skin and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

**Prevention of Fire and Explosion:** Keep from contact with oxidizing materials.

**Storage:** Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

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## 8 OUTLINE DEMARCATION AND PERSONAL PROTECTION EQUIPMENT

**Occupational exposure controls: Not established**

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. Respirator type: N95 Particulate Filter. A full-face positive-pressure air-supplied respirator must be worn if hazardous decomposition products are likely to be released or have been released. See Stability and Reactivity Section. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

**Eye protection:** Wear safety glasses with side shields (or goggles) and a face shield.

**Skin and body protection:** Wear impervious gloves and protective clothing appropriate for the risk of exposure.

**Recommended Decontamination Facilities:** Safety shower, eye wash, washing facilities as appropriate to condition of use.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE</b>	liquid
<b>COLOR</b>	dark red
<b>ODOR</b>	sulphurous
<b>SOLUBILITY</b>	100% soluble in water
<b>BOILING POINT (°C)</b>	100°C - 212°F
<b>Melting Point</b>	less than 0°C - 32°F
<b>FLAMING POINT</b>	Not applicable.
<b>Imflammable/</b>	Not inflammable.
<b>Catching light temperature:</b>	
<b>SELF FLAMMABILITY</b>	Not self-flammable
<b>FIRE PROMOTING QUALITIES</b>	Not combustible.
<b>DANGER OF EXPLOSION</b>	No danger of explosion.
<b>RELATIVE DENSITY</b>	1.29
<b>pH-VALUE, CONC. SOLUTION</b>	12.4

## 10 STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions  
**CONDITIONS TO AVOID:** Avoid contact with acids  
Generates toxic gas in contact with acid.

**HAZARDOUS POLYMERISATION** Will not polymerize.  
**MATERIALS TO AVOID** Strong acids. Strong alkalis. Avoid contact with other photographic solutions and cleaning compounds.

**HAZARDOUS DECOMPOSITION PRODUCTS**  
sulphur oxides, hydrogen sulphide.

## 11 TOXICOLOGICAL INFORMATION

### Effects of Exposure

**Inhalation:** Harmful if inhaled. If hydrogen sulphide gas is liberated due to contact with acid, it may cause headache, nausea, dizziness, confusion, weakness, unconsciousness, convulsions, and death.

**Eyes:** Causes eye burns.

**Skin:** Harmful if absorbed through skin. Causes skin irritation.

**Ingestion:** Harmful if swallowed. If free gastric acidity is high, hydrogen sulfide is liberated in the stomach and may cause systemic toxic effects such as vomiting, respiratory depression, tremors, convulsions and death.

### Acute Toxicity Data:

Oral LD50 (rat): 1,600 mg/kg

Skin irritation: severe (The product may be absorbed through the skin.)

Skin irritation: Corrosive (4-hour DOT Skin Corrosivity Test, Destruction of skin tissue as a result of more than 3 minutes exposure.)

Eye irritation: severe

## 12 ECOLOGICAL INFORMATION

Environmental data is not available.

## 13 INDICATIONS FOR WASTE MANAGEMENT

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.

#### 14 TRANSPORT INFORMATION

**IATA:** UN Number: 3266

Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Sodium sulfide)

Class: 8

Packaging group: II

**IMDG:** UN Number: 3266

Proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(Sodium sulfide)

Class: 8

Packaging group: II

**US DOT:** UN Number: 3266

Proper shipping name: Corrosive liquid, basic, organic, n.o.s. (Sodium sulfide)

Class: 8

Packaging group: II

#### 15 REGULATIONS

**Identification  
by EC directives:**

The product is classified and labeled according to EC guidelines

**U.S. California Prop. 65:** none

**Carcinogenicity Classification (components present at 0.1% or more):**

International Agency for Research on Cancer (IARC): none

American Conference of Governmental Industrial Hygienists (ACGIH): none

U.S. National Toxicology Program (NTP): none

U.S. Occupational Safety and Health Administration (OSHA): none

**Chemical(s) subject to the reporting requirements of U.S. Section 313 or Title III of the Superfund  
Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372:** none

**Relevant R-phrases**

20/22 harmful by inhalation and if swallowed.

31 Contact with acids liberates toxic gas.

33 Danger of cumulative effects.

36/38 Irritating to eyes and skin.

**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-36/37 Wear suitable protective clothing and gloves. S-46 If  
swallowed seek medical advice immediately and show this  
container label.**

**61 Avoid release to the environment. Refer to special  
instructions/safety data sheets.**

**Remarks:**

This classification was carried out according to the calculation method

for preparations guideline ( 88/379/EEC).

**Water endangering class** 2 (water endangering) hazardous for water

## 16 OTHER INFORMATION

**Use:** Photographic toner

### 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.

### US/Canadian Label Statements:

**CONTAINS: Sodium Sulfide**

**DANGER!**

**CONTACT WITH ACID LIBERATES FLAMMABLE AND POISONOUS GAS**

**CAUSES SKIN AND EYE BURNS**

**DUST, MIST OR VAPOUR IRRITATING TO THE EYES AND RESPIRATORY TRACT**

**HARMFUL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED**

Do not breathe vapours or spray mist.

Do not get in eyes and avoid contact with skin and clothing.

Keep container tightly closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

**FIRST AID:** If inhaled, move to fresh air. Get medical attention. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes. If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Notes to physician:** Strong alkalis bind tissue protein. Following initial flushing of the eye with water, continued irrigation of the eye with saline is recommended. Treatment should be continued until pH of tears reaches neutral.

**ISSUED BY:**

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**REVISION DATE:**

**12 Jul 2008**

**PRINTING DATE**

**12 Jan 2002**

**1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****Chemical name/ Trade name:** BLEICHER - BLEACH**Application/use:** photographic bleach  
**Company name:** Moersch Photochemie, Am Heideberg 48  
D 50354 Hürth, Germany  
**Telephone:** ++49 22 33 943137**2 HAZARDS IDENTIFICATION****Hazard description:** Not applicable.**Information concerning particular hazards for human and environment:**

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

**3 COMPOSITION/INFORMATION ON INGREDIENTS**

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 BROMIDE	5-10%	7758-02-3	231-830-3	Xn R-20/22, 36/37/38
POTASSIUM HEXACYANOFERRATE (III)	20%	13746-66-2	237-323-3	R-32

**Other information:** further principal ingredient: Water**4 FIRST-AID MEASURES****Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.**Skin:** In case of contact, immediately flush skin with plenty of water.**Ingestion:** If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.**5 FIRE-FIGHTING MEASURES**

Instructions :

Substance is incombustible. Select fire fighting measures according to the surrounding conditions.

In case of ambient fire:

Cool surrounding containers with water spray.  
If possible, take container out of dangerous zone.  
Stay on upwind side.

## 6 ACCIDENTAL RELEASE MEASURES

**Methods for cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

## 7 HANDLING AND STORAGE

**Personal precautions:** Keep container tightly closed. Do not get in eyes and avoid contact with skin and clothing. Wash thoroughly after handling.

**Prevention of Fire and Explosion:** Substance is non-combustible. Select fire and explosion prevention measures according to the other used substances.

**Storage :**

Do not use any food containers - risk of mistake.  
Containers have to be labelled clearly and permanently.  
Store in the original container as much as possible.  
Keep container tightly closed.  
Storage temperature: 1-50°C  
Protect from exposure to light.

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## 8 OUTLINE DEMARCATION AND PERSONAL PROTECTION EQUIPMENT

**Occupational exposure controls: Not established**

## 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	liquid
COLOR	yellow
ODOR	odourless
SOLUBILITY	100% soluble in water
BOILING POINT (°C)	100°C - 212°F
RELATIVE DENSITY	1.21
pH-VALUE, CONC. SOLUTION	6.1

## 10 STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions
CONDITIONS TO AVOID:	-
HAZARDOUS POLYMERISATION	Will not polymerize.
MATERIALS TO AVOID	Acids
HAZARDOUS DECOMPOSITION PRODUCTS	Hydrocyanic acid

## 11 TOXICOLOGICAL INFORMATION

## 12 ECOLOGICAL INFORMATION

Environmental data is not available.

## 13 INDICATIONS FOR WASTE MANAGEMENT

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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## 14 TRANSPORT INFORMATION

### No dangerous good

This substance is not listed in the Annex I of Council Regulation No (EC) 304/2003.

## 15 REGULATIONS

### Identification by EC directives:

The product is classified and labeled according to EC guidelines

### Relevant R-phrases

**R-22 Harmful if swallowed. R-36 Irritating to eyes.  
R-32 Contact with acids liberates very toxic gas**

### 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**

### Remarks:

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

### Water endangering class

2 (water endangering) hazardous for water

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## 16 OTHER INFORMATION

**Use:** Photographic bleach

### 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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