

**1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Chemical name/ Trade name:** **MT4 SIENA**

**Application/use:** Photographic toner

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

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

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

**2 HAZARDS IDENTIFICATION**

**CONTAINS:** Aqueous Alkaline Photochemical Solution containing Potassium Polysulfide

**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
POTASSIUM CARBONATE	5-10%	584-08-7	209-529-3	Xn R-22, 36
SODIUM SELENITE	>1%	10102-18-8	233-267-9	T, N;R-23/25-33-50/53
POTASSIUM (POLY)SULFIDE	10-15%	37199-66-9	253-390-1	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

**STORAGE TEMPERATURE(MIN/MAX):** Store between 40 F (4.4 C) and 80 F (26 C).

Preferred storage is at 68 F (20 C).

**SHELF LIFE.....:** N.A.

**SPECIAL SENSITIVITY.....:** Keep from freezing.

**HANDLING/STORAGE PRECAUTIONS:** Avoid eye and skin contact, and store in well-ventilated area. Keep container tightly closed. Do not store with incompatible materials. Do not store or consume food, drink or tobacco in area where they may become contaminated with this material. For incompatibles see section 10.

**OTHER NOTES.....:** Keep out of the reach of children.

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## 8 OUTLINE DEMARCATION AND PERSONAL PROTECTION EQUIPMENT

**PROTECTIVE CLOTHING REQUIREMENTS....:** **Splash protection required for eyes, e.g., eye glasses with side shields or goggles.** For skin protection use chemical resistant gloves and aprons, e.g. made of neoprene, rubber or vinyl.

**VENTILATION REQUIREMENTS.....:** Use sufficient general room ventilation and/or local exhaust to maintain airborne levels of vapors below applicable exposure limits (see Section 2).

**RESPIRATOR REQUIREMENTS.....:** Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1010.134.

**ADDITIONAL PROTECTIVE MEASURES.....:** **Emergency showers and eye wash stations should be**

made available. Educate and train employees in the safe use and handling of this product.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE</b>	liquid
<b>COLOR</b>	red
<b>ODOR</b>	Smell of hydrogen sulfide (foul smelling)
<b>SOLUBILITY</b>	100% soluble in water
<b>BOILING POINT (°C)</b>	greater than 100°C - 212°F
<b>MELTING POINT</b>	less than 0°C - 32°F
<b>FLAMING POINT</b>	Not applicable.
<b>INFLAMMABILITY</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>	12.8

## 10 STABILITY AND REACTIVITY

**STABILITY**.....: This is a stable material.

**HAZARDOUS POLYMERIZATION**...: Will not occur.

**INCOMPATIBILITIES**.....: Contact with acids liberates toxic gas (hydrogen sulfide). Corrodes metals.

**INSTABILITY CONDITIONS**.....: None known.

**DECOMPOSITION PRODUCTS**.....: In case of fire, hydrogen sulfide, sulfur dioxide, and other potentially toxic fumes.

## 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

TECHNICAL SHIPPING NAME.....: **Potassium polysulfides (37199-66-9)**

PRODUCT LABEL.....: MT4 SIENA

DOT (DOMESTIC SURFACE)

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PROPER SHIPPING NAME.....: Corrosive liquid, basic, inorganic, n.o.s.

HAZARD CLASS OR DIVISION .....: 8

UN/NA NUMBER.....: UN3262

PACKING GROUP .....: III

DOT PRODUCT RQ lbs (kgs).....: None

HAZARD LABEL(s).....: Corrosive

HAZARD PLACARD(s).....: Corrosive

Limited Quantity Exception may apply to this product, for "inner packagings not over 1.0 L (0.3 gal) for liquids and 1.0 kg (2.2 lb) for solids". 173.154

(b) (1). Each package must conform to the packaging requirements of Subpart B of Part 173 and may not exceed 30 kg (66 lb) gross weight. For further information consult the 49 CFR.

469P.003

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Approval Date: 05/13/2003

IMO / IMDG CODE (OCEAN)

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UN NUMBER.....: UN3262

PACKAGING GROUP.....: III

HAZARD LABEL(s).....: Corrosive

HAZARD PLACARD(s).....: Corrosive

ICAO / IATA (AIR)

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PROPER SHIPPING NAME.....: Corrosive liquid, basic, inorganic, n.o.s.

HAZARD CLASS DIVISION NUMBER...: 8

UN NUMBER.....: UN3262

SUBSIDIARY RISK.....: None

PACKING GROUP.....: III

HAZARD LABEL(s).....: Corrosive

RADIOACTIVE?.....: Non-Radioactive

PASSENGER AIR - MAX. QTY. ....: 5 L

PASSENGER PACKING INSTRUCTION..: 818

CARGO AIR - MAX. QTY. ....: 60 L

CARGO AIR PACKING INSTRUCTION..: 820

## 15 REGULATIONS

### Identification by EC directives:

The product is classified and labeled according to EC guidelines

OSHA STATUS.....: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.



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: Potassium polysulfides (37199-66-9)**

### 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.

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