

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

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

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.

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

APPEARANCE	liquid
COLOR	red
ODOR	Smell of hydrogen sulfide (foul smelling)
SOLUBILITY	100% soluble in water
BOILING POINT (°C)	greater than 100°C - 212°F
MELTING POINT	less than 0°C - 32°F
FLAMING POINT	Not applicable.
INFLAMMATORY/	Not inflammable.
Catching light temperature:	
SELF FLAMMABILITY	Not self-flammable
FIRE PROMOTING QUALITIES	Not combustible.
DANGER OF EXPLOSION	No danger of explosion.
RELATIVE DENSITY	1.29
pH-VALUE, CONC. SOLUTION	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)

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.

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Approval Date: 05/13/2003

IMO / IMDG CODE (OCEAN)

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

HAZARD CLASS DIVISION NUMBER...: 8

UN NUMBER.....: UN3262

PACKAGING GROUP.....: III

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

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

ICAO / IATA (AIR)

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.

TSCA STATUS.....: On TSCA Inventory
CERCLA REPORTABLE QUANTITY...: None
SARA TITLE III:
SECTION 302 EXTREMELY
HAZARDOUS SUBSTANCES...: None
SECTION 311/312
HAZARD CATEGORIES.....: Immediate Health Hazard
SECTION 313
TOXIC CHEMICALS.....: None
RCRA STATUS.....: When discarded in its purchased form, this
product meets the criteria of corrosivity, and
should be managed as a hazardous waste (EPA
Hazardous Waste Number D002). (40 CFR 261.20-24)
The following chemicals are specifically listed by individual states; other
product specific health and safety data in other sections of the MSDS may also
be applicable for state requirements. For details on your regulatory
requirements you should contact the appropriate agency in your state.
COMPONENT NAME
/CAS NUMBER CONCENTRATION STATE CODE

Water
7732-18-5 70-80 % PA3, NJ4
Potassium Polysulfide
37199-66-9 20-30 % PA3, NJ4

NJ4 = New Jersey Other - included in 5 predominant ingredients > 1%
PA3 = Pennsylvania Non-hazardous present at 3% or greater.

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: 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.

ISSUED BY:

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