

MATERIAL SAFETY DATA SHEET

AGFA CORPORATION
100 Challenger Road
Ridgefield Park, NJ 07660

TRANSPORTATION EMERGENCY

CALL CHEMTREC: 800-424-9300
INTERNATIONAL: 703-527-3887

NON-TRANSPORTATION

HEALTH EMERGENCY PHONE..: (303) 623-5716
AGFA INFORMATION PHONE..: (201) 440-2500

1. CHEMICAL PRODUCT IDENTIFICATION:

PRODUCT NAME.....: Sistan
PRODUCT CODE.....: ABC Code: BMVD1000; S9YBD000
CHEMICAL FAMILY.....: Aqueous photochemical solution
BUSINESS GROUP.....: Photo Imaging Systems
AGFA MSDS NUMBER.....: 468

2. COMPOSITION/INFORMATION ON INGREDIENTS:

INGREDIENT NAME /CAS NUMBER	EXPOSURE LIMITS	CONCENTRATION (%)
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***** HAZARDOUS INGREDIENTS *****

Potassium thiocyanate 333-20-0	OSHA : Not Established ACGIH: Not Established	15-20 %
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Polyoxyethylated Octyl Phenol 9002-93-1	OSHA : Not Established ACGIH: Not Established	5-10 %
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3. HAZARDS IDENTIFICATION:

* EMERGENCY OVERVIEW *
* *
* WARNING! Color: Colorless; Form: Liquid; Odor: Odorless; *
* May cause eye, skin, and respiratory tract irritation; *
* Inhalation, skin absorption, or ingestion may result in *
* cyanosis (purplish-blue coloring of skin, fingernails, and *

3. HAZARDS IDENTIFICATION (Continued)

* lips); May be harmful if swallowed. *

POTENTIAL HEALTH EFFECTS:

ROUTE(S) OF ENTRY.....: Eye Contact; Skin Contact; Inhalation

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:

ACUTE INHALATION.....: Inhalation of potassium thiocyanate or polyoxyethylated octyl phenol may be irritating to the mucous membranes of the respiratory tract with symptoms of coughing, sore throat, and runny nose. Low doses of potassium thiocyanate may cause symptoms including cyanosis (bluish color), severe headache, nausea, vomiting. Central nervous system effects may include confusion, irritability, faintness, weakness, disorientation, lethargy, drowsiness, convulsions, coma, and unconsciousness.

ACUTE SKIN CONTACT.....: Direct contact with potassium thiocyanate or polyoxyethylated octyl phenol may cause irritation resulting in reddening, itching, drying and stinging.

ACUTE EYE CONTACT.....: Direct contact with potassium thiocyanate or polyoxyethylated octyl phenol is expected to cause eye irritation resulting in tearing, reddening, swelling and burning.

ACUTE INGESTION.....: Excessive doses of thiocyanates may cause symptoms as noted under acute inhalation.

CHRONIC EFFECTS OF EXPOSURE...: No applicable information was found concerning any adverse chronic health effects from overexposure to this product.

CARCINOGENICITY.....: The components of this product are not listed by NTP, IARC or regulated as a carcinogen by OSHA.

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE.....: Persons with preexisting eye or skin conditions or impaired pulmonary function may be more susceptible to the effects of overexposure to this product.

4. FIRST AID MEASURES:

FIRST AID FOR EYES.....: In case of contact, flush eyes with plenty of water for at least 15 minutes. Call a physician.

FIRST AID FOR SKIN.....: In case of contact, flush skin with water. Wash clothing before reuse. Contact a physician if irritation occurs.

FIRST AID FOR INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

FIRST AID FOR INGESTION.: If swallowed, call a physician.

5. FIRE FIGHTING MEASURES:

FLASH POINT.....: Noncombustible

EXTINGUISHING MEDIA.....: Material is not combustible. Use
extinguishing media suitable for other
combustible materials in the area.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate personnel to a safe area. Keep
personnel removed and upwind of fire. Wear self-contained breathing
apparatus.

6. ACCIDENTAL RELEASE MEASURES:

SPILL OR LEAK PROCEDURES.....: Utilize recommended protective clothing and
equipment (see Section 8). Take spill up with appropriate absorbent and
sweep up and place in containers. Spill area can be washed with water.
Collect wash water for approved disposal. Keep from entering water or
ground water.

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 breathing mists. Avoid getting in eyes or
on skin. Wash thoroughly after handling. Store in a dry place away from
excessive heat, in original or similar waterproof containers. Do not allow
product to freeze. Reseal containers immediately after use. Store away
from food and beverages.

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

8. PERSONAL PROTECTION:

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.

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

8. PERSONAL PROTECTION (Continued)

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:

PHYSICAL FORM.....: Liquid
COLOR.....: Colorless
ODOR.....: Odorless
pH: Approx. 4.5
BOILING POINT.....: Greater than 212 F (100 C)
MELTING/FREEZING POINT....: Less than 32 F (0 C)
SOLUBILITY IN WATER: Soluble
SPECIFIC GRAVITY: 1.098 at 68 F (20 C)
BULK DENSITY.....: Not Applicable
VAPOR PRESSURE: Approx. 23 mbar at 68 F (20 C) (water)

10. STABILITY AND REACTIVITY:

STABILITY.....: This is a stable material.
HAZARDOUS POLYMERIZATION...: Will not occur.
INCOMPATIBILITIES.....: Strong oxidizing and reducing agents.
INSTABILITY CONDITIONS.....: None known.
DECOMPOSITION PRODUCTS.....: In case of fire, oxides of sulfur, CO₂, carbon monoxide, hydrogen cyanide, and other potentially toxic fumes.

11. TOXICOLOGICAL INFORMATION:

TOXICITY DATA FOR: Potassium Thiocyanate
ACUTE TOXICITY
ORAL LD50.....: 854 mg/kg (rat)

12. ECOLOGICAL INFORMATION:

NO ECOLOGICAL INFORMATION AVAILABLE

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD.....: Recover nonusable free liquid and/or contaminated water, and dispose of in an approved and permitted treatment system. Remove nonusable solid material and/or contaminated soil, for disposal in an approved and permitted landfill. Discharge to sewer may require approval of permitting authority and may require pretreatment.

14. TRANSPORTATION INFORMATION:

TECHNICAL SHIPPING NAME.....: Aqueous Photochemical Solution
PRODUCT LABEL.....: Sistan

DOT (DOMESTIC SURFACE)

HAZARD CLASS OR DIVISION: Non-Regulated

IMO / IMDG CODE (OCEAN)

HAZARD CLASS DIVISION NUMBER...: Non-Regulated

ICAO / IATA (AIR)

HAZARD CLASS DIVISION NUMBER...: Non-Regulated

15. REGULATORY INFORMATION:

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.....: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to

15. REGULATORY INFORMATION (Continued)

determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (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	70-75 %	PA3, NJ4
Potassium thiocyanate 333-20-0	15-20 %	PA3, NJ4
Polyoxyethylated Octyl Phenol 9002-93-1	5-10 %	PA3, NJ4

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

16. OTHER INFORMATION:

HMIS RATINGS: Health Flammability Reactivity Personal Prot
 2 0 0 B
0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
B=Safety Glasses, Gloves

Agfa's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS ratings are provided by Agfa as a customer service.

REASON FOR ISSUE.....: Establish MSDS
PREPARED BY.....: R. Ruppel-Kerr
APPROVED BY.....: H. W. Gventer
APPROVAL DATE.....: 06/25/1998
SUPERSEDES DATE.....: None
MSDS NUMBER.....: 34282

Product: Sistan
Approval date: 06/25/1998

MSDS Page 6
Continued on next page

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Product: Sistan
Approval date: 06/25/1998

MSDS Page 7
Last page

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