

MATERIAL SAFETY DATA SHEET

1-PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER Amfix Universal Fixer / Amfix C Universal Fixer		PRODUCT NUMBER (PIN) 160201, 160204	
PRODUCT USE Photographic Processing			
MANUFACTURER'S NAME Champion Photochemistry Incorporated		SUPPLIER'S NAME Champion Photochemistry Limited/Russell Photochemistry	
STREET ADDRESS Bldg 48, Door M, Kodak Park, 1669 Lake Avenue		STREET ADDRESS 7895 Tranmere Drive, Unit 203	
CITY Rochester	STATE New York	CITY Mississauga	PROVINCE Ontario
POSTAL CODE 14652-3751	EMERGENCY TELEPHONE NO 585-760-6400	POSTAL CODE L5S 1V9	EMERGENCY TELEPHONE NO 905-670-7900

2-INGREDIENTS

INGREDIENTS	%	CAS NUMBER	LD ₅₀ OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LC ₅₀ OF INGREDIENT (SPECIFY SPECIES)
Ammonium thiosulfate	40-70	7783-18-8	2850 mg/kg (oral-rat)	no data available
Sodium bisulfite	1-5	7631-90-5	2000 mg/kg (oral-rat)	no data available

3-PHYSICAL DATA

PHYSICAL STATE Liquid	ODOUR AND APPEARANCE Clear, colorless with slight acetic acid odour			ODOUR THRESHOLD (ppm) Not determined
VAPOUR PRESSURE (mm Hg) 17	VAPOUR DENSITY (AIR=1) Approx. 0.6	EVAPORATION RATE (BUTYL ACETATE=1) <1	BOILING POINT (°C) Approx. 100	FREEZING POINT (°C) Less than 0
pH 5.0	SPECIFIC GRAVITY 1.32	COEFFICIENT WATER/OIL DIST. Not determined		

4-FIRE AND EXPLOSION

FLAMMABILITY YES OR NO IF YES, UNDER WHICH CONDITIONS? No			
MEANS OF EXTINCTION Not applicable			
FLASH POINT (°C) AND METHOD Not applicable	UPPER FLAMMABLE LIMIT (% BY VOLUME) Not applicable	LOWER FLAMMABLE LIMIT (% BY VOLUME) Not applicable	
AUTOIGNITION TEMPERATURE (°C) Not applicable	HAZARDOUS COMBUSTION PRODUCTS Oxides of sulfur, carbon and nitrogen.		
EXPLOSION DATA >	SENSITIVITY TO IMPACT Not determined	SENSITIVITY TO STATIC DISCHARGE Not determined	

5-REACTIVITY DATA

CHEMICAL STABILITY YES OR NO IF NO, UNDER WHICH CONDITIONS? Yes
INCOMPATIBILITY WITH OTHER SUBSTANCES YES OR NO IF SO, WHICH ONES? Yes, with strong acids and alkalis.
REACTIVITY, AND UNDER WHAT CONDITIONS Not determined
HAZARDOUS DECOMPOSITION PRODUCTS Sulfur dioxide and ammonia

6-TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY			
SKIN CONTACT	SKIN ABSORPTION	EYE CONTACT	INGESTION
X		X	X
EFFECTS OF ACUTE EXPOSURE TO PRODUCT May cause irritation to skin, eyes and respiratory tract.			
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT Prolonged or repeated contact with skin may cause allergic reaction.			
EXPOSURE LIMITS TWA: 5mg/m ³ sodium bisulfite	IRRITANCY OF PRODUCT Not determined	SENSITIZATION TO PRODUCT Not determined	CARCINOGENICITY Not determined
TERATOGENICITY Not determined	REPRODUCTIVE TOXICITY Not determined	MUTAGENICITY Not determined	SYNERGISTIC PRODUCTS Not determined

7-PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT		
GLOVES (SPECIFY) Rubber or plastic	RESPIRATOR (SPECIFY) Not required	EYE (SPECIFY) Splash proof safety goggles
FOOTWEAR (SPECIFY) Recommended	CLOTHING (SPECIFY) Apron (rubber or plastic)	OTHER (SPECIFY) None
ENGINEERING CONTROLS (SPECIFY, EG. VENTILATION, ENCLOSED PROCESS) Local mechanical exhaust ventilation		
LEAK AND SPILL PROCEDURE Contain leak and spill from spreading. Wear protective clothing to prevent contact with skin and eyes. Clean up spill and place in an approved container. Wash area with soap and water.		
WASTE DISPOSAL Dispose of in accordance with Federal, Provincial, State or local laws.		
HANDLING PROCEDURES AND EQUIPMENT Keep container tightly closed.		
STORAGE REQUIREMENTS Keep in a cool place		
SPECIAL SHIPPING INFORMATION In accordance with Federal, Provincial, State or local laws.		

8-FIRST AID MEASURES

SKIN CONTACT Flush with running water for at least 20 minutes. Get medical attention if irritation persists.
EYE CONTACT Flush with running water for at least 20 minutes. Get medical attention.
INHALATION Remove to fresh air.
INGESTION Immediately give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. Never give anything to an unconscious person. Give medical attention.
SPECIAL INFORMATION None

9-PREPARATION DATE OF MSDS

ADDITIONAL INFO/ COMMENTS This product is controlled according to WHMIS.		
SOURCES USED Registry of Toxic Effects of Chemical Substances, Edited by Richard L. Lewis, Doris V. Sweet, Published by NIOSH (National Institute for Occupational Safety and Health), Volume 1,2 1983-84.		
PREPARED BY Champion Photochemistry Limited	PHONE NUMBER (905) 670-7900	DATE August 2008