The Alsa Corporation

2640 East 37th Street
Vernon, California 90058

MATERIAL SAFETY DATA SHEET

DATE REVIEWED: July 12, 2007

PRODUCT NAME: CHROME FX AB SUPER CONCENTRATE

SECTION I: IDENTIFICATION OF THE PRODUCT AND OF THE PRODUCER

Trade Name: ChromeFX AB Super Concentrate
Manufactured For: Alsa Corporation
2640 E. 37th Street
Vernon, CA 90058
Tel: 323-581-5200

Emergency telephone number of the company and/or of an authorized advisory center:
Infotrac Chemical Emergency Response – 800-535-5053 / 352-323-3500

SECTION II: COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS NUMBER	EINECS NO.	CONC.
Silver Nitrate	7761-88-8	231-853-9	25-35
Ammonium Hydroxide	1336-21-6	215-647-6	2-10
Water	7732-18-5	231-791-2	50-80

SECTION III: HAZARD IDENTIFICATION

APPEARANCE: Lt. Blue color
ODOR: Ammonia Odor
EYE CONTACT: Severe irritation or burn.
SKIN CONTACT: Severe irritation or burn.
INGESTION: Swallowing can cause stomach ache or severe gastroenteritis. Contact will result in permanent pigmentation. May cause vomiting, diarrhea, collapse, shock, coma and death.
INHALATION: Inhalation of extremely high concentration may cause bronchitis and/or pneumonia with some in pulmonary function. Repeated inhalation may cause lung disease. Chronic ingestion or inhalation of Silver Nitrate may cause “argyria” which is characterized by blue gray pigmentation.
CARCINOGEN: NTP-NO; IARC-NO; OSHA-NO.

SECTION IV: FIRST AID

EYE CONTACT: Immediately flush eyes with water for 15 minutes lower and upper lids occasionally. Call a physician immediately.
SKIN CONTACT: Wash skin with mild soap and water for 15 minutes, remove

contaminated clothing and don't reuse it. Get medical attention immediately.
INGESTION: If conscious give water and to drink, induce vomiting. Highly toxic via oral. Get medical attention immediately. Never give anything by mouth to an unconscious person.
INHALATION: Remove to fresh air. If breathing is difficult administer oxygen. Get medical attention immediately.

SECTION V: FIRE FIGHTING MEASURES

FLASH POINT: N/A
Lower explosion limits: Not available
Upper explosion limits: Not available
Extinguishing media: Water fog
Special fire fighting procedure: Mixture will not burn, but ammonia gas escaping can burn in the range of 16-25% in air. Water will extinguish the flame. Wear full protective clothing and self contained breathing apparatus in the pressure demand mode.
Unusual fire and explosive hazards: Can form explosive if mixed with concentrated material. When heated, material off ammonia gas, a strong irritant to eyes. Exposed to extreme heat may develop pressure. Combustion of released ammonia may form oxides of nitrogen.

SECTION VI: ACCIDENTAL RELEASE MEASURE

Wearing protective clothing and face shield – absorb on paper towels – place in a clean dry container for disposal. Wash spilled material.
Waste disposal method: In accordance with all current local, state and federal regulations.

SECTION VII: HANDLING AND STORAGE

Keep containers sealed – away from the light and heat. Store away from readily oxidiable substances in a well ventilated area. Wash hands thoroughly with soap and water handling.

SECTION VIII: EXPOSURE CONTROL/PERSONAL PROTECTION

NAME	CAS NUMBER	EINECS NO.	STEL	LTEC (PEC)
Silver Nitrate	7760-88-8	231-853-9	NE	0.01 M=mg/m3 (Ag)
Ammonia Hydroxide	1336-21-6	215-647-6	35ppm	25 ppm

VENTILATION: A system of local and/or general exhaust is recommended to keep employee exposure below the Airborne Exposure Limits. Local exhaust ventilation is preferred because it can control the emissions of the containment at its source, preventing dispersion of it into the general work area.

PROTECTIVE GLOVES: Nitrate Rubber or Neoprene are recommended.
EYE PROTECTION: Chemical safety goggles or face shield. Do not wear contact lenses.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
Rubber apron, boots or protective coveralls.
INHALATION PROTECTION:
Laboratory fume hood. Personal respirators (NIOSH approved). If the exposure limit is exceeded and engineering controls are not feasible. A full face piece respirator with ammonia filter must be used. For emergencies or instances where the exposure levels are not known, use a full face piece positive pressure, air supplied respirator.
WARNING: Air purifying respirators do not protect workers in the oxygen deficient atmosphere.

SECTION IX: PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE: Lt. Blue Color
ODOR: Ammonia Odor
PHYSICAL STATE: Liquid
MOLECULAR WEIGHT: Not applicable
VAPOR PRESSURE: Not applicable
VAPOR DENSITY: Heavier than air
SOLUBILITY IN WATER: Complete
REACTIVITY IN WATER: None
BOILING POINT: 200F

SECTION X: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable when stored under proper conditions.
CONDITIONS TO AVOID: Excessive temperatures, light.
INCOMPATIBILITY (MATERIALS TO AVOID): Organic compounds, combustible materials strong reducing agents, strong bases, strong acids; chlorine, bromine, mercury and (bleach) react with ammonia to form explosive compounds. Avoid using metal containing copper and zinc.
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen may form hydrogen when vapors come in contact with very hard surfaces.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Do not mix concentrated solution with concentrated activator solution– may explode.

SECTION XI: TOXILOGICAL INFORMATION

Oral rat LD50 for ammonium hydroxide: 350mg/kg
Oral mouse LD50 for Silver Nitrate: 50mg/kg
Intraperitoneal mouse LD50 for Silver Nitrate: 22mg/kg
Acute: Silver/ammonia solutions a strong base and reacts with all body tissue.
Chronic: Inhalation of extremely high concentration may cause bronchitis and/or pneumonia with some in pulmonary function. Repeated inhalation may cause lung disease. Chronic inhalation or ingestion of solver may cause "argyria".

: IARC (NO); NTP (NO); OSHA (NO.

SECTION XII: ECOLOGICAL INFORMATION

Silver Nitrate: N/A
Ammonium Hydroxide:

24 HR. LC50 Rainbow trout: 0.008mg/L;
96 HR. LC50 Fathead: 8.2mg/L;
48HR. LC50 Bluegill: 0.024mg/L;
48HR. EC50 Water flea: 0.66mg/L

SECTION XIII: DISPOSAL CONSIDERATIONS

Although not a listed RCRA hazardous waste, processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Disposal of container and unused contents in accordance with federal, state and local requirements.

SECTION XIV: TRANSPORT INFORMATION

Domestic (Land, D.O.T.)
Proper Shopping Name: Ammonia Solution (With 5% Ammonia)
Hazard Class: 8
UN Number: 2672
Packing Group: III
Information Reported For Product/Size: 385 LBS

International (Water, I.M.O.)
Proper Shopping Name: Ammonia Solution (With 5% Ammonia)
Hazard Class: 8
UN Number: 2672
Packing Group: III
Information Reported For Product/Size: 385 LBS.

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SECTION XV: REGULATORY INFORMATION

SARA TITLE III
SECTION 313 – Not Tested
SARA 311/312 - Acute: (yes) Chronic: (yes) Fire: (no) Pressure: (no) Reactivity: (no)
TSCA – The components of this product are tested in the TSCA inventory.
PROPOSITION 65 – Not Used

EUROPEAN REGULATIONS
Risk Phases:
N Dangerous for the environment.
34 Causes burns.
50 Very toxic to aquatic organisms.
Safety Phases:
26 Incase of contact with eyes, rinse immediately with plenty of water and seek medical notice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S61 Avoid release to the environment.

SECTION XVI: OTHER INFORMATION

HMIS CODES -
HEALTH: 3
FLAMMABILITY: 1
REACTIVITY: 1
PERSONAL PROTECTION: E

DISCLAIMER:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.