

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: **CLEAR 4 CHROME HARDENER**
PRODUCT CODE: **APCH-712**

HMIS CODES: H F R P

SECTION I – MANUFACTURER IDENTIFICATION

MANUFACTURED FOR : ALSA CORPORATION
2640 E. 37th Street
Vernon, CA 90058
Tel: (323)581-5200
Fax: (323)589-4400

Infotrac Chemical Emergency Response: 800-535-5053/352-323-3500

DATE REVIEWED: July 13, 2007

SECTION II – COMPOSITION/INFORMATION ON INGREDIENTS

NAMES R-phrases	CAS NUMBER	EINECS-No.	CONC.
Hexamethylene-di-isocyanate 23-36/37/38-42/43	822-06-0	212-485-8	0.1 - 1
n-butyl acetate 10-66-67	123-86-4	204-658-1	10 - 25
Hexamethylen-1,6-diisocyanat homopolymer	N/A	N/A	50 - 100

SECTION III – HAZARDS IDENTIFICATION OF THE PREPARATION

Danger classification: Xi Irritant

- 10 Flammable
- 43 May cause sensitization by skin contact.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapors may cause drowsiness and dizziness.

SECTION IV – FIRST AID MEASURES

General:

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation:

Remove to fresh air, keep patient warm and at rest, if breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. If unconscious place in recovery position and seek medical advice.

Eye contact:

Remove contact lenses, irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

Skin contact:

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do **not** use solvents or thinners.

Ingestion:

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do **not** induce vomiting.

SECTION V – FIRE-FIGHTING MEASURES

Extinguishing media:

Recommended: alcohol resistant foam, CO₂, powders, water spray/mist.

Not to be used: water jet

MATERIAL SAFETY DATA SHEET

Recommendations: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not allow to run-off from fire fighting to enter drains or water courses.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Exclude sources of ignition and ventilate the area. Avoid breathing vapors. Refer to protective measures listed in sections 7 and 8. Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth. Place in suitable decontaminant.

One possible (flammable) decontaminant comprises (by volume):

- water (45 parts),
- ethanol or isopropyl alcohol (50 parts),
- concentrated (d : 0,880) ammonia solution (5 parts)

A non-flammable alternative is

- sodium carbonate (5 parts),
- water (95 parts).

Add the same decontaminant to the remnants and let stand for several days until no further reaction in non-sealed container. Once this stage is reached, close container and dispose according to local regulations (see section 13). Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

SECTION VII – HANDLING AND STORAGE

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons spraying this preparation.

Handling;

Vapours are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than occupational exposure limits.

Additionally, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep container tightly closed. Precautions should be taken to minimize exposure to atmospheric humidity or water: CO₂ will be formed which in closed container can result in pressurization. Care should be taken when re-opening partly used containers. Isolate from sources of heat, sparks, and open flame. No sparking tools should be used.

Avoid skin and eye contact. Avoid the inhalation of dust, particulates and spray mist arising from the application of this preparation. Avoid inhalation of dust from sanding. Smoking, eating, and drinking should be prohibited in application area. For personal protection see Section 8. Never use pressure to empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws.

Storage:

Observe label precautions. Store between 10 and 25 °C in a dry, well ventilated place away from sources of heat and direct sunlight. Keep away from sources of ignition. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials as well as of amines, alcohols and water. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons spraying this preparation.

Engineering Measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by spray operator even when good ventilation is provided.

MATERIAL SAFETY DATA SHEET

In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory must be worn. (See Personal Protection).

Exposure Limits

Occupational exposure limit for :

Names	CAS Number	EINECS-No.	STEL	LTEL
hexamethylene-di-isocyanate	822-06-0	212-485-8	.02 ppm	.005 ppm
n-butyl acetate	123-86-4	204-658-1	200 ppm	150 ppm

Personal Protection

Respiratory protection:

By spraying: air fed respirator

By other operations other than spraying: in well ventilated areas, air-fed respirators could be replaced by a combination of charcoal filter and particulate filter mask.

Hand protection:

For prolonged or repeated handling, use: gloves.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Eye protection:

Use safety eyewear designed to protect against splash of liquids.

Skin protection:

Personnel should wear anti-static clothing made of natural fiber or of high temperature resistant synthetic fiber.

SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES

General Information

Appearance	: Liquid
Colour	: colorless
Odor	: characteristic

Important health, safety and environmental information

Flash point	: 95° F	DIN 53213
Lower explosion limit	: 1.7 Vol. %	
Upper Explosion limit	: 7.6 Vol. %	
Vapor pressure at 20°C	: 3 mbar	
Specific gravity at 20°C	: 1.07 g/cm ³	
Solubility in water	: insoluble	
Boiling range	: 248-262°F	

SECTION X – STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 7). In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, may be produced. Keep away from oxidizing agents, strongly alkaline and strongly acidic materials, amines, alcohols and water. Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result in distortion, blowing and in extreme cases bursting of the container.

SECTION XI – TOXICOLOGICAL INFORMATION

There are no data available on the preparation itself. The preparation has been assessed following the conventional methods of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Chapter 2 and 15 for details.

Based on the properties of the isocyanate components and considering toxicological data on similar preparations, this preparation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentration well below the OEL. Repeated exposure may lead to permanent respiratory disability.

MATERIAL SAFETY DATA SHEET

Exposure to component solvents vapors concentration in excess of the stated occupational exposure limit may result in adverse health effect such as mucous membrane and respiratory system irritation and adverse effect on headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

The liquid splashed in the eyes may cause irritation and reversible damage.

SECTION XII – ECOLOGICAL INFORMATION

The product should not be allowed to enter drains or water courses. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment.

SECTION XIII – DISPOSAL CONSIDERATIONS

Do not allow into drains or water courses. Residues in empty containers should be neutralized with decontaminant (see Section 6). Wastes and emptied containers are to be deposited according to the official rules.

Code of waste Waste Designation:
080111 waste paint and varnish containing organic solvents or other dangerous substances.

SECTION XIV – TRANSPORT INFORMATION

Transport in accordance with ADR/DOT for road, RID for rail, IMDG for sea and ICAO/IATA for air transport.

ADR/RID Class: 3
Tremcard: n.a.
UN-No: 1263
Transport document name: paint and paint related material

Packaging group: III
IMDG Class: 3
EmS: F-E, S-E
UN No: 1263
Proper shipping name: paint and paint related material
Packaging group: III

SECTION XV – REGULATORY INFORMATION

In accordance with requirements of the Classification Packaging and Labeling of Dangerous Preparations Regulations (1999/45/EC). The product is labeled as follows:

Danger Classification:
Xi Irritant

Contains:
Hexamethylen-1, 6-diisocyanat homopolymer

R-phrases:
10 Flammable
43 May cause sensitization by skin contact.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapors may cause drowsiness and dizziness

S-phrases:
24 Avoid contact with skin.
37 Wear suitable gloves.
38 In case of insufficient ventilation, wear suitable respiratory equipment.
51 Use only in well-ventilated areas.
23 Do not breathe vapor.

Special provisions concerning the labeling of preparations:

MATERIAL SAFETY DATA SHEET

91 Contains isocyanates. See information supplied by the manufacturer.

This information is supplied in the present Safety Data Sheet.

U.S. Federal Regulations

SARA313 - No component is listed

SARA 311/312 Acute(Yes), Chronic(Yes), Fire(Yes), Pressure(No), Reactivity(Yes)

TSCA – All Components are listed in TSCA inventory

California Proposition 65 – not listed

SECTION XVI – OTHER INFORMATION

HMIS CODES:

Health	2
Flammability	3
Reactivity	1
Protection	H

The information of this MSDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfill the demand laid down in the local rules and legislation. The information in this MSDS is meant as a description of the safety requirements of our product: it is not to be considered as a guarantee of the products' properties.