

UNITED RESIN CORPORATION -- METAL BOND HARDENER 4X-93 -- 8040-00-846-3351
===== Product Identification =====

Product ID:METAL BOND HARDENER 4X-93
MSDS Date:10/02/1992
FSC:8040
NIIN:00-846-3351
Kit Part:Y
MSDS Number: BQWDB
=== Responsible Party ===
Company Name:UNITED RESIN CORPORATION
Address:4359 NORMANDY COURT
City:ROYAL OAK
State:MI
ZIP:48073
Country:US
Info Phone Num:313-549-8200
Emergency P
hone Num:313-549-8200
CAGE:1FD35
=== Contractor Identification ===
Company Name:UNITED RESIN CORPORATION
Address:4359 NORMANDY COURT
City:ROYAL OAK
State:MI
ZIP:48073
Country:US
Phone:248-549-8200/
CAGE:1FD35

===== Composition/Information on Ingredients =====

Ingred Name:POLYAMIDE RESIN
CAS:68410-23-1
Other REC Limits:NONE SPECIFIED

Ingred Name:TERTIARY AMINE DERIVATIVE OF PHENOL
CAS:90-72-2
RTECS #:SN3500000
Other REC Limits:NONE SPECIFIED

Ingred Name:SYNTHETIC GRAPHITE
CA

S:7782-42-5
RTECS #:MD9659600
Other REC Limits:NONE SPECIFIED
OSHA PEL:15 MPPCF RDUST
ACGIH TLV:2 MG/M3 RDUST; 9293

Ingred Name:COPPER (SARA III)
CAS:7440-50-8
RTECS #:GL5325000
Other REC Limits:NONE SPECIFIED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

===== Hazards Identification =====

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:SKIN: SEVERE IRRITATION OR CHEMICAL
BURNS. EYE: SE
VERE EYE IRRITATION, SWELLING, CHEMICAL BURNS.
INHALATION: IRRITATING TO UPPER RESPIRATORY TRACT. INGESTION:
GASTROINTESTINAL IRRITATION OR ULCERATION . MAY CAUSE DAMAGE TO
MUCOUS MEMBRANES IF SWALLOWED.
Explanation of Carcinogenicity:THIS MATERIAL IS NEITHER CARCINOGENIC OR
POTENTIALLY CARCINOGENIC.

===== First Aid Measures =====

First Aid:INHALATION: REMOVE VICTIM TO FRESH AIR. EYES: FLUSH EYES WITH
GENEROUS AMOUNTS OF WATER FOR AT LE
AST 15 MINUTES. GET MED
ATTENTION IF APPEARS NECESSARY. SKIN: IMMEDIATELY WASH SKIN WITH
SOAP & WATER. WASH CONTAMINATED CLOTHING BEFORE REUSE. INGESTION:
DONT INDUCE VOMITING. GIVE LARGE AMOUNTS OF WATER OR MILK IF
AVAILABLE. CALL DR. TREATMED BASED ON JUDGMENT OF DR IN RESPONSE TO
REACTIONS OF VICTIM.

===== Fire Fighting Measures =====

Flash Point Method:COC
Flash Point:400F,204C
Extinguishing Media:WATER FOG, CARBON DIOXIDE, FOAM, OR DRY

CHEMICAL

Fire Fighting Procedures:DONT ENTER CONFINED FIRE SPACE W/OUT FULL PROTECT GEAR INCLUDING POS PRESSURE, SELF-CONTAINED, NIOSH BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS W/WATER.

Unusual Fire/Explosion Hazard:CONTAINER AREAS EXPOSED TO INTENSE HEAT OR FLAME SHOULD BE COOLED WITH WATER TO PREVENT PRESSURE BUILD-UP AND/OR WEAKENING OF CONTAINER STRUCTURE.

===== Accidental Release Measures =====

Spill Release Procedures:USE CAUTIOUS JUDGEMENT WHEN CLEANING SPILLS.

SMALL SPILLS MAY BE COLLECTED WITH ABSORBENT MATERIAL, SUCH AS CLAY OR SAND. LARGE SPILLS SHOULD BE DIKED AND CONTAINED WITH ABSORBENT MATERIALS. FLUSH ARE A WITH WATER SPRAY TO REMOVE RESIDUE.

===== Handling and Storage =====

Handling and Storage Precautions:STORE AT AMBIENT TEMPERATURES IN WELL VENTILATED AREA. AVOID SPARKS, OPEN FLAMES AND EXTREME HEAT. STORE SEPARATELY FROM AMINE CURING AGENTS.

Other Precau

tions:PROTECT CONTAINER FROM PHYSICAL DAMAGE. CONTAINERS, EVEN EMPTY CAN CONTAIN HAZARDOUS RESIDUE. HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL PRACTICES. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. WASH C ONTAMINATED CLOTHING BEFORE REUSE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:WEAR NIOSH APPROVED RESPIRATORY PROTECTION WHERE EXPOSURE LIMITS ARE EXCEEDED OR IN THE ABSENCE OF PROPER ENVIRONMENTAL CONTROL.

Ventilation:USE

ONLY WITH ADEQUATE VENTILATION. LOCAL EXHAUST IS RECOMMENDED. MECHANICAL EXHAUST CAN BE USED AS A BACK-UP SYSTEM.

Protective Gloves:CHEMICAL RESISTANT GLOVES (RUBBER/PVA)

Eye Protection:SAFETY GLASSES, GOGGLES W/SIDE SHIELDS

Other Protective Equipment:CHEMICAL RESISTANT CLOTHING AS REQUIRED TO MINIMIZE SKIN CONTACT.

Work Hygienic Practices:WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, APPLYING COSMETICS, OR USING TOILET FACILITIES.

Supplemental Safety and Health

=====

===== Physical/Chemical Properties =====

Vapor Pres:NEGLIGIBLE

Vapor Density:>1

Spec Gravity:1.09 (WATER=1)

Solubility in Water:MODERATE

Appearance and Odor:AMBER LIQUID WITH AMMONIACAL ODOR

Percent Volatiles by Volume:0

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

NONE KNOWN

Stability Condition to Avoid:AVOID HIGH TEMPERATURES, OPEN FLAME AND
UNSCHEDULED CONTACT WITH RESIN SYSTEMS.

Hazardous Decomposit

ion Products:COMBUSTION BY-PRODUCTS MAY INCLUDE

OXIDE OF NITROGEN (NOX) AND CARBON WHEN BURNING.

Conditions to Avoid Polymerization:AVOID MIXING RESIN AND HARDENER IN
UNCONTROLLABLE QUANTITIES.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF FLUSH LEGALLY. DISPOSE IN ACCORDANCE
WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for

use by elements of the Department

of Defense. The United States of America in no manner whatsoever,

expressly or implied, warrants this information to be accurate and

disclaims all liability for its use. Any person utilizing this

document should seek competent professional advice to verify and

assume responsibility for the suitability of this information to their

particular situation.