



# Material Safety Data Sheet

000219

AMERZINE(R) 35 CORROSION INHIBITOR

PAGE: 1

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD)

PRODUCT NAME: AMERZINE(R) 35 CORROSION INHIBITOR  
CAS NUMBER: 302 01 2

DREW CHEMICAL CORPORATION  
110 GENESSEE STREET  
SUITE 340  
AUBURN  
NY 13021

00 10 033  
DATA SHEET NO: 0002457-005  
LATEST REVISION DATE: 12/86-86336  
PRODUCT: DE217006  
INVOICE:  
INVOICE DATE:  
TO:

DISTRICT MANAGER

## SECTION I-PRODUCT IDENTIFICATION

GENERAL OR GENERIC ID: CORROSION INHIBITOR  
DOT HAZARD CLASSIFICATION: NOT APPLICABLE

## SECTION II-COMPONENTS

IF PRESENT, IARC, NTP AND OSHA CARCINOGENS ARE IDENTIFIED IN THIS SECTION  
SEE DEFINITION PAGE FOR CLARIFICATION

INGREDIENT	% (BY WT)	NOTE
HYDRAZINE CAS # 1 302-01-2 IDENTIFIED AS A CARCINOGEN BY NTP, IARC	35 PEL, 1 PPM - SKIN TLV, 0.1 PPM - SKIN	( 1)

( 1): DUE TO REPORTED TUMORIGENIC ACTIVITY IN ANIMAL STUDIES, NIOSH RECOMMENDS AN EXPOSURE LEVEL OF 0.04 MG/CUM FOR HYDRAZINE.

## SECTION III-PHYSICAL DATA

PROPERTY	REFINEMENT	MEASUREMENT
BOILING POINT	FOR PRODUCT	228.00 - 248.00 DEG F ( 108.88 - 120.00 DEG C) 760.00 MMHG
VAPOR PRESSURE	FOR PRODUCT	0.80 MMHG 77.00 DEG F ( 25.00 DEG C)
SPECIFIC VAPOR DENSITY	AIR : 1	1.0
SPECIFIC GRAVITY		1.025 77.00 DEG F ( 25.00 DEG C)
PERCENT VOLATILES		>95%
EVAPORATION RATE		SLOWER THAN ETHER
PH		11.5 - 12.5
APPEARANCE		CLEAR, YELLOW COLOR
STATE		LIQUID
FORM		HOMOGENEOUS SOLUTION

## SECTION IV-FIRE AND EXPLOSION INFORMATION

FLASH POINT > 200.0 DEG F  
( 93.3 DEG C)

EXPLOSIVE LIMIT (PRODUCT) LOWER - 9.3% UPPER - 83.4%

EXTINGUISHING MEDIA: WATER FOG

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON DIOXIDE AND CARBON MONOXIDE, NITROGEN COMPOUNDS, AMMONIA

FIREFIGHTING PROCEDURES: WATER MAY BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL UNTIL FIRE IS OUT.

WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE WHEN FIGHTING FIRES.  
SPECIAL FIRE & EXPLOSION HAZARDS: NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.  
FLAMMABLE AIR-VAPOR MIXTURES MAY FORM-- HYDRAZINE CAN IGNITE SPONTANEOUSLY WHEN DISPERSED IN AIR AND WHEN IN CONTACT WITH POROUS MATERIALS SUCH AS EARTH, ASBESTOS, WOOD OR CLOTH (RAGS SHOULD NEVER BE USED TO WIPE-UP SPILLS).

NFPA CODES: HEALTH- 3 FLAMMABILITY- 2 REACTIVITY- 1

## SECTION V-HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL 1 PPM - SKIN  
THRESHOLD LIMIT VALUE .1 PPM - SKIN

## Material Safety Data Sheet



**Drew Industrial Division**  
 ASHLAND CHEMICAL COMPANY, L. ASHLAND OIL INC  
 One Drew Plaza, Boonton, New Jersey 07005  
 Phone (201) 263-7606 Telex 136444  
 24-HOUR EMERGENCY TELEPHONE 606 324-1133

AMERZINC(R) 35 CORROSION INHIBITOR

PAGE: 2

000219

## SECTION V-HEALTH HAZARD DATA (CONTINUED)

## EFFECTS OF ACUTE OVEREXPOSURE, FOR PRODUCT

**EYES** - CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION; LIQUID CAN CAUSE SEVERE OR PERMANENT EYE DAMAGE.  
**SKIN** - CAN CAUSE REDDENING, IRRITATION, DERMATITIS, POSSIBLE SENSITIZATION.  
**SKIN** - HYDRAZINE IS TOXIC VIA SKIN ABSORPTION; MAY CAUSE DELAYED OR CUMULATIVE EFFECTS. SYMPTOMS MAY INCLUDE DIZZINESS AND NAUSEA. EXTENSIVE SKIN ABSORPTION CAN RESULT IN KIDNEY & LIVER DAMAGE, BLOOD CHANGES AND CENTRAL NERVOUS SYSTEM DEPRESSION.  
**BREATHING** - CAN CAUSE DAMAGE TO NASAL AND RESPIRATORY PASSAGES.  
**SWALLOWING** - RESULTS IN SEVERE DAMAGE TO MUCOUS MEMBRANCES.

## FIRST AID:

**IF ON SKIN:** IMMEDIATELY FLUSH EXPOSED AREA WITH WATER FOR AT LEAST 15 MINUTES, GET MEDICAL ATTENTION. REMOVE CONTAMINATED CLOTHING. LAUNDRY CONTAMINATED CLOTHING BEFORE RE-USE. DISCARD CONTAMINATED SHOES.  
**IF IN EYES,** IMMEDIATELY FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION. IF PHYSICIAN IS NOT IMMEDIATELY AVAILABLE, CONTINUE FLUSHING WITH WATER.  
**IF SWALLOWED,** IMMEDIATELY DRINK TWO GLASSES OF WATER AND INDUCE VOMITING BY EITHER GIVING IPECAC SYRUP OR BY PLACING FINGER AT BACK OF THROAT. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION IMMEDIATELY.  
**IF BREATHING,** IF AFFECTED, REMOVE INDIVIDUAL TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. IF BREATHING HAS STOPPED GIVE ARTIFICIAL RESPIRATION. KEEP PERSON WARM, QUIET AND GET MEDICAL ATTENTION.

## PRIMARY ROUTE(S) OF ENTRY:

SKIN CONTACT  
 INHALATION  
 SKIN ABSORPTION

## EFFECTS OF CHRONIC OVEREXPOSURE, FOR PRODUCT

HYDRAZINE IS, A STRONG IRRITANT TO EYES, SKIN AND MUCOUS MEMBRANES; A SKIN SENSITIZER; A CONVULSANT; A HEPATOTOXIN AND A MODERATE HEMOLYTIC AGENT (DESTROYS RED BLOOD CELLS). HYDRAZINE HAS BEEN SHOWN TO CAUSE CANCER IN LABORATORY ANIMALS EXPOSED ORALLY, INTRAPERITONEALLY OR BY INHALATION. WARNING PROPERTIES ARE NOT ADEQUATE FOR PROLONGED EXPOSURES.

## SECTION VI-REACTIVITY DATA

HAZARDOUS POLYMERIZATION; CANNOT OCCUR

STABILITY; STABLE

INCOMPATIBILITY; AVOID CONTACT WITH; STRONG OXIDIZING AGENTS., LEAD, COPPER OR THEIR ALLOYS, ORGANIC MATERIALS, EXCESSIVE HEAT

## SECTION VII-SPILL OR LEAK PROCEDURES

## STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

**SMALL SPILL;** EVACUATE AREA. COVER SPILL WITH SODA ASH OR SODIUM BICARBONATE. MIX AND SPRAY WITH WATER. IF EFFERVESCENT, WAIT UNTIL REACTION IS COMPLETE. SCOOP INTO LARGE BEAKER.  
**LARGE SPILL;** ELIMINATE ALL IGNITION SOURCES (FLARES, FLAMES INCLUDING PILOT LIGHTS, ELECTRICAL SPARKS). PERSONS NOT WEARING PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM AREA OF SPILL UNTIL CLEAN-UP HAS BEEN COMPLETED. STOP SPILL AT SOURCE, DIKE AREA OF SPILL TO PREVENT SPREADING, PUMP LIQUID TO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND SHOVELED INTO CONTAINERS.

## WASTE DISPOSAL METHOD:

**SMALL SPILL;** CAUTIOUSLY ADD EQUAL VOLUME OF CALCIUM HYPOCHLORITE. ADD MORE WATER, STIR, ALLOW TO STAND FOR 1 HOUR, DILUTE AND NEUTRALIZE. FLUSH DOWN DRAIN WITH EXCESS WATER IN ACCORDANCE WITH APPLICABLE REGULATIONS.  
**LARGE SPILL;** MIX WITH EQUAL VOLUME OF SODA ASH AND ADD WATER TO FORM A SLURRY IN A LARGE CONTAINER. ADD CALCIUM HYPOCHLORITE, ADD MORE WATER AND LET STAND FOR 2 HOURS. NEUTRALIZE AND WASH DOWN DRAIN WITH EXCESS WATER IN ACCORDANCE WITH APPLICABLE REGULATIONS.

## SECTION VIII-PROTECTIVE EQUIPMENT TO BE USED

RESPIRATORY PROTECTION; IF TLV OF THE PRODUCT OR ANY COMPONENT IS EXCEEDED, A NIOSH/MSHA JOINTLY APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS UNDER SPECIFIED CONDITIONS. (SEE YOUR SAFETY EQUIPMENT SUPPLIER). ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

VENTILATION; PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST)

## Material Safety Data Sheet



**Drew Industrial Division**  
 ASHLAND CHEMICAL COMPANY DIV. ASHLAND OIL INC.  
 One Drew Plaza, Boonton, New Jersey 07005  
 Phone (201) 263-7600 Telex 136444  
 24-HOUR EMERGENCY TELEPHONE 606.324.1133

AMERZINE(R) 35 CORROSION INHIBITOR

PAGE: 3

000219

-----  
 SECTION VIII-PROTECTIVE EQUIPMENT TO BE USED (CONTINUED)  
 -----

VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).  
 PROTECTIVE GLOVES, WEAR RESISTANT GLOVES SUCH AS, POLYVINYL CHLORIDE  
 EYE PROTECTION, CHEMICAL SPLASH GOGGLES AND FACE SHIELD (8" MIN.) IN COMPLIANCE  
 WITH OSHA REGULATIONS ARE ADVISED; HOWEVER, OSHA REGULATIONS ALSO PERMIT OTHER  
 TYPE SAFETY GLASSES. (CONSULT YOUR SAFETY EQUIPMENT SUPPLIER)  
 OTHER PROTECTIVE EQUIPMENT; TO PREVENT SKIN CONTACT, WEAR IMPERVIOUS FULL-BODY  
 PROTECTIVE CLOTHING.

-----  
 SECTION IX-SPECIAL PRECAUTIONS OR OTHER COMMENTS  
 -----

TO STORE LARGE AMOUNTS OF HYDRAZINE SOLUTIONS, A HORIZONTAL CYLINDRICAL TANK KEPT  
 UNDER SLIGHT PRESSURE WITH NITROGEN IS RECOMMENDED. EACH TANK SHOULD BE  
 ELECTRICALLY GROUNDED AND FITTED WITH A FLUID INLET CONNECTION, LEVEL GAUGE,  
 PRESSURE GAUGE, RUPTURE DISC, RELIEF VALVE, AND A FLAME ARRESTOR AT ITS TOP.  
 RUPTURE-DISC DISCHARGE SHOULD BE DIRECTED SO THAT NO WORKING AREAS WILL BE  
 CONTAMINATED. A TOP OUTLET WITH SUMP AND DIP-LEG SHOULD BE USED TO ELIMINATE  
 LEAKAGE. LARGE HORIZONTAL TANKS SHOULD BE SET ON CONCRETE PADS. DRUMS SHOULD  
 BE STORED ON CONCRETE PADS WITH LOW CURBS TO CONTROL DRAINAGE. BEFORE DRUMS  
 ARE EMPTIED, THE DRUMS AND OTHER EQUIPMENT USED IN THE OPERATION SHOULD BE  
 ELECTRICALLY BONDED AND GROUNDED.

HYDRAZINE-CONTAINING PRODUCTS SHOULD BE STORED AT TEMPERATURES WELL-BELOW THEIR  
 BOILING POINT, AWAY FROM IGNITION SOURCES AND OXIDANTS, AND PREFERABLY  
 OUTDOORS. HYDRAZINE CONTAINERS STORED OUTDOORS SHOULD BE SHELTERED AGAINST  
 DIRECT SUNLIGHT, DIRT, SNOW, WATER, AND ICE ACCUMULATION. FOR INDOOR STORAGE  
 AREAS, CONTINUOUS VENTILATION SHOULD BE PROVIDED. MAJOR STORAGE AREAS SHOULD  
 BE DIKED WITH CONCRETE TO HOLD AT LEAST 110% OF THE TOTAL STORAGE CAPACITY AND  
 HAVE A CONCRETE SLAB BELOW THE STORAGE TANK, SO THAT SPILLED HYDRAZINE WILL  
 NOT BE SOAKED IN THE GROUND. THE DIKED AREA SHOULD BE KEPT CLEAN, AND THE  
 DIXING SYSTEM SHOULD DRAIN TO A BURN BASIN, A COLLECTION BASIN, OR RECLAMATION  
 SUMP.

CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS  
 RETAIN PRODUCT RESIDUES (VAPOR, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS  
 GIVEN IN THIS DATA SHEET MUST BE OBSERVED.

THE INFORMATION ACCUMULATED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED  
 TO BE WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO  
 CONFIRM IN ADVANCE OF NEED THAT THE INFORMATION IS CURRENT, APPLICABLE, AND  
 SUITABLE TO THEIR CIRCUMSTANCES.