

PHILIPP BROTHERS CHEMICALS, INC. <_>
CP/PHIBROCHEM <_> ONE PARKER PLAZA
CP CHEMICALS, INC. <_> 14TH FLOOR
PHIBRO-TECH, INC. <_> FORT LEE, N.J. 07024
AGTROL CHEMICAL PRODUCTS <_> (201)944-6020
KOFFOLK, INC. <_> (803)481-8528
<_>

***** 24 HOUR EMERGENCY CONTACT: CHEMTREC (800)424-9300 *****
DATE: 10/01/96 SUPERSEDES: 8/01/96

01 PRODUCT IDENTIFICATION

***** N.F.P.A. *****			
DEGREE OF HAZARD		EMERGENCY HAZARD RATING	
4 = EXTREME	HEALTH	< 0 >	
3 = HIGH	FIRE	< 0 >	
2 = MODERATE	REACTIVITY	< 0 >	
1 = SLIGHT	SPECIFIC HAZARD	< >	
0 = INSIGNIFICANT			

TSCA CAS NO.: 330-95-0
TRADE NAME: NICARB 25%
CHEMICAL NAME: NICARBAZIN
FORMULA: C19H18N6O6 MOLECULAR WT.: 426.38
SYNONYMS: NONE

02 HAZARDOUS INGREDIENTS

INGREDIENTS (CAS NO.)	WT PCT (APPROX)	PEL MG/M3	PPM	TLV(TWA) MG/M3	PPM
NICARBAZIN (330-95-0)	25	NE		NE	
NE: NOT ESTABLISHED					

THE TLV'S ARE GIVEN FOR GUIDANCE; LOCAL APPLICABLE REGULATIONS SHOULD ALWAYS BE FOLLOWED. INGREDIENTS ARE THOSE PRESENT AT 1% OR GREATER, OR AT 0.1% OR GREATER IF LISTED AS POTENTIAL CARCINOGENS BY OSHA/IARC/NTP. PROPRIETARY INGREDIENT IDENTITIES ARE AVAILABLE IN ACCORDANCE WITH 29 CFR 1910.1200.

CARCINOGEN: NTP - NO; IARC - NO; OSHA - NO
EPA - NO

03 PHYSICAL AND CHEMICAL CHARACTERISTICS

NA = NOT APPLICABLE, NE = NOT ESTABLISHED, D = DECOMPOSES

BOILING POINT, 760 MM HG (DEG C): NA
MELTING/FREEZING POINT (DEG C): NA
SPECIFIC GRAVITY (WATER = 1): NA
VAPOR PRESSURE (MM HG): NA
VAPOR DENSITY (AIR = 1): NA
WATER SOLUBILITY (% BY WT): PRACTICALLY INSOLUBLE
VOLATILES (% BY WT): NA
EVAPORATION RATE (BUTYL ACETATE = 1): NA
PH OF SOLUTION: NA
APPEARANCE/ODOR: ODORLESS, YELLOW TO TAN POWDER OR CRYSTALS.

04 PHYSICAL HAZARD DATA

AS WITH MOST ORGANIC SOLIDS, FIRE IS POSSIBLE AT ELEVATED TEMPERATURES OR BY CONTACT WITH AN IGNITION SOURCE.

FLASH POINT (DEG C): NA TEST METHOD: NA
FLAMMABLE LIMITS (% BY VOL): NA
AUTOIGNITION TEMP. (DEG C): NA
EXTINGUISHING MEDIA: USE ANY SUITABLE MEANS TO EXTINGUISH SURROUNDING FIRE. FOAM OR DRY CHEMICAL PREFERRED. WATER SPRAY MAY BE USED.
SPECIAL FIRE FIGHTING PROCEDURES: USE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE. WEAR PROTECTIVE CLOTHING APPROPRIATE TO THE SURROUNDING FIRE.
UNUSUAL FIRE OR EXPLOSION HAZARDS: FINE DUST DISPERSED IN AIR IN SUFFICIENT CONCENTRATIONS AND IN THE PRESENCE OF AN IGNITION SOURCE IS A POTENTIAL DUST EXPLOSION HAZARD.
NA: NOT APPLICABLE

05 REACTIVITY DATA

THERMAL STABILITY: STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE. COMPLEX IS SLOWLY DECOMPOSED BY TRITURATION WITH WATER, OR MORE RAPIDLY BY DILUTE AQUEOUS ACIDS.

INCOMPATIBILITY: SEE STABILITY.

HAZARDOUS POLYMERIZATION: NO INFORMATION FOUND.

HAZARDOUS DECOMPOSITION PRODUCTS: DURING FIRE CONDITIONS MAY EMIT TOXIC FUMES OF NITROGEN OXIDES, CARBON MONOXIDE AND CARBON DIOXIDE.

06 HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE:

SYMPTOMS OF INGESTION: NO KNOWN EFFECTS. NON TOXIC.

INHALATION: DUST MAY BE IRRITATING TO NASAL PASSAGES AND THROAT.

SYMPTOMS OF SKIN CONTACT: NO ADVERSE EFFECTS EXPECTED.

TEMPORARY DISCOLORATION IS POSSIBLE.

SYMPTOMS OF EYE CONTACT: MAY CAUSE MECHANICAL IRRITATION.

CHRONIC EXPOSURE: NO INFORMATION FOUND. HOWEVER, PROPER PRE-CAUTIONS SHOULD BE TAKEN TO PROTECT SENSITIVE INDIVIDUALS.

TOXICITY DATA: LD50: 25G/KG (IN MICE)

07 EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: IMMEDIATELY, FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS APART. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

SKIN CONTACT: WASH AFFECTED AREA THOROUGHLY WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDRY BEFORE REUSE.

INHALATION: REMOVE TO FRESH AIR. KEEP WARM AND QUIET. CONSULT A PHYSICIAN FOR ANY BREATHING DIFFICULTIES.

INGESTION: NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

DILUTE BY GIVING PATIENT SEVERAL GLASSES OF WATER. IF LARGE
QUANTITIES WERE SWALLOWED, CONSULT A PHYSICIAN.

NOTES TO PHYSICIAN

NONE

08 INDUSTRIAL HYGIENE AND OCCUPATIONAL CONTROL PROCEDURES

VENTILATION: A SYSTEM OF LOCAL EXHAUST IS RECOMMENDED TO KEEP EMPLOYEE
EXPOSURE BELOW THE AIRBORNE EXPOSURE LIMITS. LOCAL EXHAUST IS USUALLY
PREFERRED BECAUSE IT CONTROLS THE EMISSION AT ITS SOURCE, PREVENTING
DISPERSION OF IT INTO THE GENERAL WORK AREA. REFER TO THE ACGIH
DOCUMENT "INDUSTRIAL VENTILATION, A MANUAL OF RECOMMENDED PRACTICES"
FOR DETAILS.

RESPIRATORY PROTECTION: NIOSH/MSHA APPROVED DUST/MIST RESPIRATOR
MAY BE WORN.

EYE PROTECTION: SAFETY GOGGLES.

SKIN PROTECTION: USE RUBBER OR PLASTIC IMPERVIOUS GLOVES AND BODY-
COVERING CLOTHING.

PERSONAL HYGIENE: WASH THOROUGHLY AFTER HANDLING.

AN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES SHOULD BE MAINTAINED
IN THE WORK AREA.

09 SAFE HANDLING, STORAGE, AND USE PRECAUTIONS

PRECAUTIONARY MEASURES: AVOID GENERATING DUST. WASH THOROUGHLY AFTER
USING. AVOID BREATHING DUST. USE WITH ADEQUATE VENTILATION.
KEEP IN A TIGHTLY CLOSED CONTAINER. STORE IN A COOL, DRY, WELL
VENTILATED AREA. PROTECT FROM EXPOSURE TO DILUTE ACIDS OR WATER.
PROTECT FROM PHYSICAL DAMAGE.

10 ENVIRONMENTAL AND DISPOSAL PROCEDURES

SPILL/LEAK CLEAN-UP PROCEDURES: VENTILATE AREA OF LEAK OR SPILL.
SWEEP, SCOOP, VACUUM, OR PICK UP SPILLED MATERIAL. AVOID DUSTING.
USE NON-SPARKING TOOLS. PACKAGE FOR RECLAMATION OR RECOVERY.

WHATEVER CANNOT BE SAVED MAY BE DISPOSED OF IN AN APPROVED LANDFILL.
PREVENT SPILLED MATERIAL OR RUN-OFF FROM GETTING INTO SEWERS OR
WATERWAYS.

DISPOSAL METHOD: DISPOSE OF IN AN APPROVED CHEMICAL WASTE LANDFILL IN
ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

SUPERFUND REPORTABLE QUANTITY(RQ): NOT REGULATED.

HAZARDOUS WASTE NO.: NOT REGULATED.

SARA TITLE III: NOT SUBJECT TO REPORTING.

(SECTION 313)

11 TRANSPORTATION DATA

DOT SHIPPING NAME: MEDICINAL FEED COMPOUND
(NICARB 25%)

DOT HAZARD CLASS: NOT DOT REGULATED

HAZARDOUS INGREDIENTS: NOT APPLICABLE EXCEPT UNDER "ADDITIONAL
WARNINGS AND INFORMATION"

IDENTIFICATION NUMBER: NONE

12 ADDITIONAL WARNINGS AND INFORMATION

HIGHLY TOXIC TO AQUATIC ORGANISMS.

ALL INFORMATION PRESENTED HEREIN IS GIVEN IN GOOD FAITH AND IS BASED
ON SOURCES AND TESTS CONSIDERED TO BE RELIABLE BUT CANNOT BE
GUARANTEED. IT IS THE USER'S FULL RESPONSIBILITY TO ACCEPT RISK FOR
THE SAFETY, TOXICITY, HANDLING, STORAGE, AND USE OF THE PRODUCT AS
WELL AS TO DETERMINE THE SUITABILITY OF THE PRODUCT FOR A SPECIFIC
PURPOSE. WE MAKE NO WARRANTY AS TO THE RESULTS TO BE OBTAINED IN
USING THE PRODUCT; THEREFORE ALL RISKS MUST BE ASSUMED BY THE USER.