

MATERIAL SAFETY DATA SHEET: BLUE BEAST

Section I - General Information

(000000-000000- - 0567)

Date of Issue:
7/10/2006 12:00:00 AM
Chemical Name & Synonyms:
N/A
Chemical Family:
AMINE/GLYCOL ETHER AQUEOUS SOLUTION
Manufacturer Name:
CHEMSEARCH DIV. OF NCH CORP.
Manufacturer Address:
BOX 152170
IRVING, TX 75015
Prepared By:
R Mohochi/Chemist

Supercedes:
5/31/2002 12:00:00 AM
Trade Name & Synonyms:
BLUE BEAST
Formula is a mixture: [✓]

Product Code Number: 0567
Emergency Phone Number: 800-424-9300

Section II - Hazardous Ingredients

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS

Chemical Name (Ingredients)	Hazard	TLV	PEL	STEL	CAS #
SAFROL	CARC/IRR	N/E 1	N/E 2	N/E	94-59-7
MONOETHANOLAMINE (MEA)	IRRITANT	3 PPM 1	3 PPM 2	6 PPM 1	141-43-5
ETHYLENE GLYCOL MONOBUTYL ETHER (EGBE)	IRRITANT	20 PPM 1	50 PPM 2	NOT EST	111-76-2
NONYLPHENOL POLYETHYLENE GLYCOL ETHER	IRRITANT	N/E 1	N/E 2	N/E	127087-87-0

Section III - Physical Data

Boiling Point (°F):210°
Vapor Pressure (mm Hg):16.31
Vapor Density (Air=1):0.6
pH @ 100% :12.4
% Volatile by Volume:95
H₂O Solubility:COMPLETE

Specific Gravity (H₂O=1):1.01
Color:BLUE
Odor:SASSAFRAS
Clarity:TRANSPARENT
Evaporation Rate (BuAc=1):0.46
Viscosity:NON-VISCOUS

Section IV - Fire and Explosion Hazard

Flash Point: >200°F
Flammable Limits: PRODUCT MIXTURE
LEL: 1.1%

Method Used: SETAFLASH
UEL: 23.5%
Aerosol Level (NFPA 30B): N/A

Extinguishing Media:

<input checked="" type="checkbox"/> Foam	<input checked="" type="checkbox"/> Alcohol Foam	<input checked="" type="checkbox"/> CO ₂
<input checked="" type="checkbox"/> Dry Chemical	<input checked="" type="checkbox"/> Water Spray	<input type="checkbox"/> Other

NFPA 704 Hazard Rating:

4-Extreme	Health: 3
3-High	Flammability: 1
2-Moderate	Instability: 1
1-Slight	Special:
0-Insignificant	

Special Fire Fighting Procedures:

FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. EXTINGUISHING MEDIA SHOULD BE CHOSEN BASED ON THE NATURE OF THE SURROUNDING FIRE. COOL FIRE-EXPOSED CONTAINERS WITH WATER SPRAY TO PREVENT BURSTING.

Unusual Fire and Explosion Hazards:

THE USE OF WATER SPRAY (FOG) WHILE EFFECTIVE, MAY CAUSE FROTHING AND FOAMING. NEVER USE A WATER JET AS THIS WILL JUST SPREAD THE FIRE. USE CARE AS SPILLS MAY BE SLIPPERY.

Section V - Health and Hazard Data

Threshold Limit Value:

NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

Effects of Overexposure:

Acute: (Short Term Exposure)

EYE CONTACT: CAUSES SEVERE IRRITATION SEEN AS TEARING, REDNESS, EXCESSIVE BLINKING, SWELLING AND A BURNING SENSATION. PROLONGED CONTACT CAN CAUSE CORNEAL DAMAGE, BURNS AND POSSIBLE BLINDNESS. SKIN CONTACT: CAUSES SEVERE IRRITATION SEEN AS REDNESS, ITCHING, AND A BURNING SENSATION. PROLONGED CONTACT CAN CAUSE TISSUE DESTRUCTION, ULCERATION, AND BLEEDING. MAY BE ABSORBED THROUGH THE SKIN WITH EFFECTS AS THOSE FOR INGESTION SEEN AS CENTRAL NERVOUS SYSTEM DEPRESSION, BLOOD ABNORMALITIES, KIDNEY, AND LIVER DAMAGE AND EVEN DEATH. INHALATION: CAUSES RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. AT LOW VAPOR CONCENTRATIONS, NO HARMFUL EFFECTS ARE EXPECTED. AT HIGH VAPOR CONCENTRATIONS, INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE, DIZZINESS, DROWSINESS, WEAKNESS, UNCONSCIOUSNESS, POSSIBLE ANESTHETIC EFFECTS FROM CENTRAL NERVOUS SYSTEM DEPRESSION, AND MAY BE FATAL. INGESTION: CAUSES IRRITATION WITH POSSIBLE NAUSEA, VOMITING, AND DIARRHEA. INGESTION OF LARGE AMOUNTS MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SIMILAR TO INHALATION. MAY CAUSE BLOOD ABNORMALITIES, KIDNEY DAMAGE, LIVER DAMAGE, AND COMA. INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL.

Chronic: (Long Term Exposure)

PROLONGED AND REPEATED EXPOSURE TO VAPORS MAY CAUSE DAMAGE TO LUNGS, KIDNEYS, SPLEEN, TESTIS, LIVER, CENTRAL NERVOUS SYSTEM. PROLONGED CONTACT TO DILUTE SOLUTIONS MAY CAUSE ECZEMA. UPON REPEATED OR PROLONGED CONTACT, THIS PRODUCT MAY BE ABSORBED IN TOXIC AMOUNTS CAUSING BLOOD ABNORMALITIES, WEIGHT LOSS, ANOREXIA. EXCESSIVE INHALATION OF VAPORS MAY CAUSE THE PRESENCE OF BLOOD IN THE URINE. INGESTION MAY BE HARMFUL WITH SYMPTOMS SIMILAR TO INTOXICATION, THE SEVERITY OF WHICH DEPENDS ON THE AMOUNT INGESTED. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS; PRE-EXISTING KIDNEYS, LIVER, LUNGS, SPLEEN, BLOOD, AND TESTES DISEASES. TARGET ORGANS: LIVER, KIDNEYS, LUNGS, BLOOD, SPLEEN, AND TESTES. THE PRIMARY ROUTES OF EXPOSURE ARE SKIN AND EYE CONTACT.

Primary Routes of Entry

Inhalation Ingestion Absorption

Emergency First Aid Procedures:

Inhalation:
REMOVE FROM THE AREA TO FRESH AIR. SEEK MEDICAL ATTENTION IF RESPIRATORY IRRITATION DEVELOPS OR IF BREATHING BECOMES DIFFICULT.

Eye Contact:

IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. GET IMMEDIATE MEDICAL ATTENTION.

Skin Contact:

IMMEDIATELY REMOVE CONTAMINATED CLOTHING AND SHOES. FLUSH AFFECTED AREAS WITH LARGE AMOUNTS OF WATER FOR 20 TO 30 MINUTES. GET IMMEDIATE MEDICAL ATTENTION. DISCARD CLOTHING AND SHOES.

Ingestion:

GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

Notes to Physician:

ORGANIC ABNORMALITIES RESULTING FROM OVEREXPOSURE TO ETHYLENE GLYCOL MONOBUTYL ETHER BY ANY ROUTE LIKELY WOULD BE AN ABNORMAL BLOOD PICTURE CHARACTERIZED BY ERYTHROPENIA, RETICULOCYTOSIS, GRANULOCYTOSIS AND LEUKOCYTOSIS. INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. DEPENDING ON THE AMOUNT INGESTED AND RETAINED AS WELL AS THE TOXICITY OF THE PRODUCT, GASTRIC LAVAGE SHOULD BE CONSIDERED. KEEP PATIENT'S HEAD BELOW HIPS TO PREVENT PULMONARY ASPIRATION. IF COMATOSE, A CUFFED ENDOTRACHEAL TUBE WILL PREVENT ASPIRATION.

Section VI - Toxicity Information

Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:

IARC NTP OSHA ACGIH Other

VOC CONTENT: 20% BY WEIGHT; 21.2% BY VOLUME; 202 G/L

SAFROL
 ORL-RAT LD50: 1950 MG/KG 3.
 ORL-RBT LDLo: 1 GM/KG 3.
 ORL-RAT TDLo: 200 G/KG/94W-C 3.
 SKN-RBT SDT: 500 MG/24H MOD 3.
 SKN-RBT LD50: >5 GM/KG 3.

CARCINOGENIC DATA: PRODUCT CONTAINS APPROXIMATELY 90% SAFROLE WHICH HAS BEEN FOUND TO BE A CARCINOGEN IN ANIMALS. ITS EFFECT ON HUMANS IS UNKNOWN ALTHOUGH SAFROLE HAS BEEN PROHIBITED FOR USE IN HUMAN FOODS BY THE FDA. 4.
 IARC CLASSIFICATION: GROUP 2B
 NTP: PART B- REASONABLY ANTICIPATED TO BE A HUMAN CARCINOGEN.

MONOETHANOLAMINE
 ORL-RAT LD50: 1720 MG/KG 3.
 SKN-RBT LD50: 1000 MG/KG 3.
 SKN-RBT (OPEN): 505 MG MODERATE 3.
 EYE-RBT SDT: 250 UG SEVERE 3.
 IHL-MUS LC50: >2420 MG/M3/2H 3.
 ORL-RAT TDLo: 115 G/KG/90D-C: CHANGES IN LIVER AND BLADDER WEIGHTS 3.
 ORL-RAT TDLo: 500 MG/KG; FEMALE 6-15 DAYS AFTER CONCEPTION; FETAL DEATH AND MUSCULOSKELETAL SYSTEM ABNORMALITIES 3.

ETHYLENE GLYCOL MONOBUTYL ETHER (EGBE)
 SKN-RBT (OPEN): 500 MG MILD 3.
 EYE-RBT SDT: 100 MG SEVERE 3.
 ORL-RAT LD50: 470 MG/KG 3.
 SKN-RBT LD50: 220 MG/KG 3.
 IHL-RAT LC50: 450 PPM/4H 3.
 IHL-RAT TCLO: 100 PPM/6H (6-18D PREG): TER 3.

ALTHOUGH THE LISTED EFFECTS WERE OBSERVED IN LABORATORY ANIMALS UPON INHALATION OF THIS MATERIAL, STUDIES HAVE ALSO SUGGESTED THAT THERE IS LITTLE POSSIBILITY OF SIGNIFICANT ADVERSE HEALTH EFFECTS IN HUMANS EXPOSED IN THE WORKPLACE TO LEVELS THAT COMPLY WITH THE OSHA PERMISSIBLE EXPOSURE LIMIT OF 50 PPM. AT 100 PPM SOME SUBJECTIVE COMPLAINTS WERE SEEN IN SENSITIVE INDIVIDUALS, AND EVEN AT 200 PPM THE PRIMARY COMPLAINT WAS IRRITATION. THIS APPEARS TO BE ONE OF THE FEW MATERIALS TO WHICH THE HUMAN IS MORE RESISTANT THAN THE USUAL EXPERIMENTAL ANIMALS. 5.
 INHALATION EXPOSURE TO ETHYLENE GLYCOL MONOBUTYL ETHER PRODUCED SOME EVIDENCE OF CANCER IN MICE IN A LONG-TERM BIOASSAY, NO EVIDENCE OF CANCER IN MALE RATS AND EQUIVOCAL EVIDENCE IN FEMALE RATS. 6.

NONYLPHENOL POLYETHYLENE GLYCOL ETHER
 ORL-RAT LD50: 1.3 G/KG 4.
 SKN-RBT LD50: 2 ML/KG/24HR OCCLUDED 4.
 SKN-RBT: NO IRRITATION (UNCOVERED) 4.
 EYE-RBT: 0.5 ML @ 5% DILUTION (SEVERE CORNEAL INJURY) 4.

CONTAINS SURFACTANT WHICH, BASED ON STUDIES WITH RABBITS INVOLVING THE SUSTAINED OCCLUDED CONTACT OF THE UNDILUTED SURFACTANT WITH SKIN, INDICATE THAT SUCH CONDITIONS MAY RESULT IN THE DEVELOPMENT OF INFLAMMATORY CHANGES IN THE LUNG. SEVERAL STUDIES HAVE RESULTED IN SLIGHTLY INCREASED KIDNEY WEIGHTS IN MALE RATS CONTINUOUSLY EXPOSED TO NONYLPHENOL AT DIETARY CONCENTRATIONS OF 200 PPM OR GREATER. TUBULAR DEGENERATION WAS OBSERVED AT 650 AND 2000 PPM. 4.

Section VII - Reactivity Data

Stability

Stable Unstable

Conditions to Avoid:

AVOID HEAT, HOT SURFACES, SPARKS, AND OPEN FLAMES.

Hazardous Polymerization

Will not occur May occur

Conditions to Avoid:

NONE KNOWN.

Incompatibility (Materials to Avoid):

STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE; ACIDS, BASES, ALDEHYDES, KETONES, EPOXIDES, VINYL CHLORIDE, VINYL ACETATE, ACRYLIC MONOMERS, ACROLEIN, ACRYLONITRILE, FORMATES, LACTONES, HALOGENATED HYDROCARBONS, ORGANIC ANHYDRIDES, AND ORGANIC HALIDES; MATERIALS REACTIVE WITH HYDROXYL COMPOUNDS; PROLONGED CONTACT WITH REACTIVE METALS, SUCH AS ALUMINUM, COPPER, BRASS, BRONZE, CHROMIUM, MAGNESIUM, TIN, ZINC, AND ALLOYS, CAN CAUSE THE FORMATION OF FLAMMABLE HYDROGEN GAS WHICH CAN FORM AN EXPLOSIVE MIXTURE WITH AIR; UNDER CERTAIN CONDITIONS, MAY REACT WITH NITRITES OR OTHER NITROSATING AGENTS TO FORM CARCINOGENIC NITROSAMINES.

Hazardous Decomposition Products:

OXIDES OF CARBON AND NITROGEN; AMMONIA, AMINES, ALDEHYDES, AND KETONES.

Section VIII - Spill Or Leak Procedures

Steps to be Taken if Material is Released or Spilled:

WEAR APPROPRIATE PROTECTIVE CLOTHING. USE CARE AS SPILLS MAY BE SLIPPERY. SHUT OFF SOURCE OF LEAK. DIKE AND CONTAIN SPILL. ABSORB WITH AN INERT MATERIAL AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. PREVENT PRODUCT FROM CONTAMINATING SOIL OR FROM ENTERING SEWAGE AND DRAINAGE SYSTEMS AND BODIES OF WATER. FLUSH AREA WITH WATER.

Waste Disposal Method(s):

DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

Neutralizing Agent:

N/A

Section IX - Special Protection Information

Required Ventilation:

LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT CAN GENERATE EXCESSIVE LEVELS OF VAPORS. LOCAL VENTILATION IS PREFERRED, BECAUSE IT PREVENTS DISPERSION INTO WORK AREAS BY CONTROLLING IT AT ITS SOURCE.

Respiratory Protection:

RESPIRATORS SHOULD BE SELECTED BY AND USED UNDER THE DIRECTION OF A TRAINED HEALTH AND SAFETY PROFESSIONAL FOLLOWING REQUIREMENTS FOUND IN OSHA'S RESPIRATOR STANDARD (29 CFR 1910.134) AND ANSI'S STANDARD FOR RESPIRATORY PROTECTION (Z88.2-1992). FOR CONCENTRATIONS ABOVE THE TLV AND/OR PEL BUT LESS THAN 10 TIMES THESE LIMITS, A NIOSH APPROVED HALF-FACEPIECE RESPIRATOR EQUIPPED WITH APPROPRIATE CHEMICAL CARTRIDGES MAY BE USED. FOR CONCENTRATIONS GREATER THAN 10 TIMES THE TLV AND/OR PEL, CONSULT THE NIOSH RESPIRATOR DECISION LOGIC FOUND IN PUBLICATION NO. 87-116 OR ANSI Z88.2-1992.

Glove Protection:

NEOPRENE OR NITRILE RUBBER GLOVES SHOULD BE WORN. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR HAND PROTECTION, 29 CFR 1910.138.

Eye Protection:

CHEMICAL GOGGLES SHOULD BE WORN WHEN HANDLING. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR EYE AND FACE PROTECTION, 29 CFR 1910.133.

Other Protection:

WEAR PROTECTIVE CLOTHING WHEN HANDLING. A SAFETY SHOWER AND AN EYEWASH STATION SHOULD BE AVAILABLE. REMOVE SOAKED CLOTHING AND SHOES. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

Section X - Storage and Handling Information

Storage Temperature	
Max: 120°F	Min: 35°F

Storage Conditions			
<input checked="" type="checkbox"/> Indoors	<input type="checkbox"/> Outdoors	<input type="checkbox"/> Heated	<input type="checkbox"/> Refrigerated

Precautions to be Taken in Handling and Storing:

ALWAYS STORE MATERIAL IN ITS ORIGINAL CONTAINER. KEEP THE CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUES WHICH MAY EXHIBIT THE HAZARDS OF THE PRODUCT. TO AVOID POSSIBLE EXPLOSION DO NOT PRESSURIZE, CUT, WELD, SOLDER, DRILL, GRIND, OR EXPOSE EMPTY CONTAINERS TO HEAT, HOT SURFACES, SPARKS, OR OPEN FLAMES. GROUND AND BOND CONTAINER WHEN HANDLING NEAR FLAMMABLE VAPORS AND ALL SOURCES OF IGNITION. KEEP FROM FREEZING. IF PRODUCT FREEZES ALLOW IT TO SLOWLY WARM TO ROOM TEMPERATURE AND STIR THOROUGHLY BEFORE USING.

Other Precautions:

KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS. TRACES OF FREE ETHYLENE OXIDE MAY BE PRESENT IN THIS PRODUCT AND COULD ACCUMULATE IN THE HEADSPACE OF STORAGE AND TRANSPORT VESSELS.

Section XI - Regulatory Information

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Upper % Limit</u>
GLYCOL ETHERS	N/A	20
SAFROL	94-59-7	1

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

Please call 1-800-527-9919 for additional information if you are a California customer. This MSDS is not intended for users in the state of California.

Section XII - References

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSURE INDICES, ACGIH, 2006.
2. OSHA PEL.
3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFOweb, 2006.
4. VENDOR'S MSDS.
5. DISSOLVING THE MYTHS ABOUT EGBE AND HEALTH, CMA, GLYCOL ETHER PANEL, 1989.
6. CHEMICAL MANUFACTURERS ASSOCIATION, NOVEMBER 9, 1998.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORMULATION. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

CHEMSEARCH DIV. OF NCH CORP. assumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage, or disposal of the product.

©2008 [NCH Corporation](#) All rights reserved.