Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED):	***NF 450 Part B***
SYNONYMS:	None known
CAS#:	Mixture
PRODUCT USE:	This product is used for floor coating
CHEMICAL SHIPPING NAME/CLASS:	Amines, liquid, corrosive, N.O.S. Class 8
U.N. NUMBER:	UN2735
MANUFACTURER'S NAME:	Bayvex Technologies
ADDRESS:	8231 214th Street W, Lakeville, MN 55044
BUSINESS PHONE #:	1-952-491-0024
EMERGENCY PHONE #:	Infotrac 1-800-535-5053
DISTRIBUTOR NAME:	Penntek Industrial Coatings
ADDRESS:	7850 Lakeville Blvd., Lakeville, MN 55044
BUSINESS PHONE #:	1-844-290-9364
EMERGENCY PHONE #:	Infotrac 1-800-535-5053
DATE OF CURRENT REVISION:	April 2, 2025
DATE OF LAST REVISION:	October 3, 2023

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is a yellow-amber liquid with an amine odor.
Health Hazards: Prolonged or repeated exposure may cause irritation to skin with possible sensitization. May cause serious irritation to eyes upon contact with redness and tearing. Ingestion of this product may cause gastrointestinal irritation.
Flammability Hazards: This product is a Non-Flammable liquid with a flash point of >200°F (>93.3°C)
Reactivity Hazards: None known
Environmental Hazards: The Environmental effects of this product have not been investigated. Release of this product may have adverse long-term effects in the aquatic environment.

US DOT SYMBOLS



CANADA (WHMIS) SYMBOLS

Complies with WHMIS 2015

EUROPEAN and (GHS) Hazard Symbols



Signal Word: **Danger!**

CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1910.1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:

This product does meet the definition of a hazardous substance or preparation as defined by OSHA in 29 CFR 1910.1200 or the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:
EC# 202-679-0 is indexed in EINECS, Index# 604-090-00-8
EC# 952-483-0 is classified in EINECS
EC# 949-140-2 is classified in EINECS
Proprietary Ingredient is indexed in EINECS
EC# 247-063-2 is classified in EINECS
EC# 202-013-9 is indexed in EINECS, Index# 603-069-00-0
EC# 284-325-5 is indexed in EINECS, Index# 601-063-00-8
Substances not listed either individually or in group entries must be self classified.

Component(s) Contributing to Classification(s)
All Ingredients

GHS Hazard Classification(s):
Acute Oral Toxicity Category 4
Skin Irritant Category 2
Skin Sensitizer Category 1
Serious Eye Damage Category 1
Acute Inhalation Toxicity Category 4
Reproductive Toxicity Category 2

Hazard Statement(s):
H302: Harmful if swallowed
H315: Causes skin irritation
H317: May cause allergic skin reaction
H318: Causes serious damage
H332: Harmful if inhaled
H361: Suspected of damaging fertility or the unborn child

Response Statement(s):
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P302+P352: IF ON SKIN: Wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310: Immediately call a POISON CENTER or doctor/physician
P308+P313: IF exposed or concerned: Get medical advice/attention.

Storage Statement(s):
P403+P235: Store in a well-ventilated place. Keep cool.
P404: Store in a closed container

Disposal Statement(s):
P501: Dispose of contents/container in accordance with local/national/international regulations.

Precautionary Statement(s):
P202: Do not handle until all safety precautions have been read and understood.
P233: Keep container tightly closed.
P264: Wash thoroughly after handling
P280: Wear protective gloves/eye protection/face protection.

Other Known Hazard(s):
This mixture does not meet the criteria for PBT or vPvB in accordance with Annex VI.
No other hazards known

HEALTH HAZARDS OR RISKS FROM EXPOSURE:
SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of overexposure for this product are by contact with skin or eyes, inhalation of vapors and ingestion. The symptoms of overexposure are described below.
ACUTE:
INHALATION: Inhalation of vapors/mist/spray may cause respiratory irritation.
CONTACT WITH SKIN: Prolonged and repeated contact may cause irritation to skin. May cause skin sensitization.
EYE CONTACT: Direct eye contact can cause serious damage/irritation with redness, tearing and blurred vision.
INGESTION: Ingestion may cause gastrointestinal irritation, nausea and vomiting.
CHRONIC: None known
TARGET ORGANS: Acute: Skin, Respiratory System and Eyes **Chronic:** None known

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS #	Hazard Classification
4-tert-Butylphenol	20 – 30%	98-54-4	202-679-0	H315: Skin Irritant Cat 2, H318: Eye Damage Cat 1, H361: Reproductive Toxicity Cat 2, H410: Aquatic Toxicity Cat 1
O,O'-Bis(2-aminopropyl) Polypropylene Glycol	20 – 30%	9046-10-0	952-483-0	H315: Skin Irritant Cat 2, H318: Eye Damage Cat 1, H317: Skin Sensitizer Cat 1
1,3-Benzenedimethanamine	10 – 20%	1477-55-0	949-140-2	H302: Acute Oral Toxicity Cat 4, H315: Skin Irritant Cat 2, H318: Eye Damage Cat 1, H317: Skin Sensitizer Cat 1
Proprietary Ingredient	1 – 10%	Trade Secret	Trade Secret	H302: Acute Oral Toxicity Cat 4, H319: Eye Irritant Cat 2, H332: Acute Inhalation Toxicity Cat 4
2,2,4-trimethylhexane-1,6-diamine	1 – 10%	25513-64-8	247-063-2	H302: Acute oral Toxicity Cat 4, H315: Skin Irritant Cat 2, H317: Skin Sensitizer Cat 1
2,4,6-tri(dimethylaminomethyl) phenol	<5%	90-72-2	202-013-9	H302: Acute Oral Toxicity Cat 4, H315: Skin Irritant Cat 2, H319: Eye Irritant Cat 2
Nonyl phenol	1 – 5%	84852-15-3	284-325-5	H302: Acute Oral Toxicity Cat 4, H315: Skin Irritant Cat 2, H318: Eye Damage Cat 1, H361: Reproductive Toxicity Cat 2, H410: Aquatic Toxicity Cat 1
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).				

NOTE: This product has been classified in accordance with the hazard criteria of 29CFR1910.1200 and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z 7250: 2000*.

4. FIRST-AID MEASURES

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water. Remove contact lenses if easy to do and continue rinsing for at least 15 minutes. Seek medical attention.
SKIN CONTACT: Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.
INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.
INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin or respiratory conditions may be aggravated.
RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

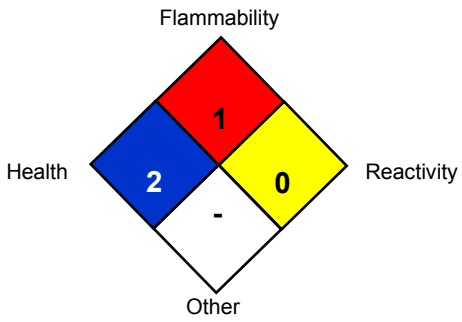
5. FIRE-FIGHTING MEASURES

FLASH POINT: Non-Flammable liquid with flash point >200°F (>93.3°C)
AUTOIGNITION TEMPERATURE: Not Available
FLAMMABLE LIMITS (in air by volume, %): Lower NA Upper NA
FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods below:

Water Spray: Yes	Carbon Dioxide: Yes
Foam: Yes	Dry Chemical: Yes
Halon: Yes	Other: Any "C" Class

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known
Explosion Sensitivity to Mechanical Impact: No
Explosion Sensitivity to Static Discharge: No
SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD (BLUE)	2
FLAMMABILITY HAZARD (RED)	1
PHYSICAL HAZARD (YELLOW)	0

PROTECTIVE EQUIPMENT

EYES	RESPIRATORY	HANDS	BODY
	See Sect 8		See Sect 8

For Routine Industrial Use and Handling Applications

Hazard Scale: **0** = Minimal **1** = Slight **2** = Moderate **3** = Serious **4** = Severe * = Chronic hazard

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Stop the flow of material, if this can be done safety. Contain discharged material. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Place in a proper container for disposal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations)

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Ensure adequate ventilation. Wash thoroughly after handling this product. Use good hygiene practices.
STORAGE AND HANDLING PRACTICES: Store in original container. Keep container closed when not in use. Store in a cool, dry location.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS:

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
4-tert-Butylphenol	98-54-4	Not Listed	Not Listed
O,O'-Bis(2-aminopropyl) Polypropylene Glycol	9046-10-0	Not Listed	Not Listed
1,3-Benzenedimethanamine	1477-55-0	0.1 mg/m³ Ceiling	0.1 mg/m³ Ceiling
Proprietary Ingredient	Trade Secret	10 ppm	10 ppm
2,2,4-trimethylhexane-1,6-diamine	25513-64-8	Not Listed	Not Listed
2,4,6-tri(dimethylaminomethyl) phenol	90-72-2	Not Listed	Not Listed
Nonyl phenol	84852-15-3	Not Listed	Not Listed

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.
The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.
RESPIRATORY PROTECTION: Always use in adequately ventilated area. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.
EYE PROTECTION: Safety glasses or goggles are recommended to avoid eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.
SKIN PROTECTION: Wear impervious gloves for prolonged or repeated exposure as appropriate to task avoid when using this product. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.
BODY PROTECTION: Use body protection appropriate to task being performed. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE (Physical State) and COLOR: This product is a yellow-amber liquid with an amine odor.
ODOR: None
ODOR THRESHOLD: Not Available
pH: Not Available
MELTING/FREEZING POINT: Not Available
BOILING POINT: Not Available
FLASH POINT: >93.3°C / >200°F
EVAPORATION RATE (n-BuAc=1): Not Available
FLAMMABILITY (SOLID, GAS): Not Applicable
UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS: Not Available
VAPOR PRESSURE (mm Hg @ 20°C (68°F): Not Available
VAPOR DENSITY: Not Available
SPECIFIC GRAVITY: Not Available
SOLUBILITY IN WATER: Insoluble
WEIGHT PER GALLON: 8.23
PARTITION COEFFICENT (n-octanol/water): Not Available
AUTO-IGNITION TEMPERATURE: Not Available
DECOMPOSITION TEMPERATURE: Not Available
VISCOSITY: 100 Centipoise

10. STABILITY and REACTIVITY

STABILITY: Stable under conditions of normal storage and use.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products include oxides of carbon and possible harmful vapors.
MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizing materials, strong acids and excessive heat.
POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur.
CONDITIONS TO AVOID: Incompatible materials and ignition sources.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

Chemical Name	CAS#	Oral LD50	Dermal LD50	Inhalation LC50
4-tert-Butylphenol	98-54-4	No Data Available	No Data Available	No Data Available
O,O'-Bis(2-aminopropyl) Polypropylene Glycol	9046-10-0	2885 mg/kg	2980 mg/kg	>20 mg/L
1,3-Benzenedimethanamine	1477-55-0	980 mg/kg Rat	No Data Available	1.34 mg/L(4hr)
Proprietary Ingredient	Trade Secret	1620 mg/kg Rat	No Data Available	>4.178 mg/L (4hr)
2,2,4-trimethylhexane-1,6-diamine	25513-64-8	910 mg/kg Rat	No Data Available	No Data Available
2,4,6-tri(dimethylaminomethyl) phenol	90-72-2	1673 mg/kg	1280 mg/kg	>20 mg/L
Nonyl phenol	84852-15-3	1300 mg/kg Rat	No Data Available	No Data Available

Acute Toxicity	**Acute Oral & Inhalation Toxicity Category 4**
Skin Corrosion / Irritation	**Skin Irritant Category 2**
Serious Eye Damage / Irritation	**Eye Damage/Irritant Category 1**
Respiratory or Skin Sensitization	**Skin Sensitization Category 1**
Germ Cell Mutagenicity	**Based on available data, the classification criteria are not met**
Carcinogenicity	**Based on available data, the classification criteria are not met**
Reproductive Toxicity	**Reproductive Toxicity Category 2**
STOT – Single Exposure	**Based on available data, the classification criteria are not met**
STOT – Repeated Exposure	**Based on available data, the classification criteria are not met**
Aspiration Hazard	**Based on available data, the classification criteria are not met**

SUSPECTED CANCER AGENT: None of the ingredients within this product are found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, or suspected to be, cancer-causing agents by these agencies.
IRRITANCY OF PRODUCT: Exposure to this product may cause skin and eye irritation.
SENSITIZATION TO THE PRODUCT: This product may cause skin sensitization.
REPRODUCTIVE TOXICITY INFORMATION: This product contains an ingredient reported to affect reproductivity.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.
ENVIRONMENTAL STABILITY: No specific data available on this product.
CHEMICAL EFFECT ON PLANTS, ANIMALS AND AQUATIC LIFE: This product may cause harm to plants, animals or aquatic life.
WATER ENDANGERMENT CLASS: Water endangering in accordance with EU Guideline 91/155-EWG – Not Determined.
SPECIFIC AVAILABLE COMPONENT INFORMATION: No additional data available at this time.

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.
EU Waste Code: Not determined

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

PROPER SHIPPING NAME:	Amines, liquid, corrosive (Trimethylhexamethylenediamine, 1,3-Benzenedimethanamine)
HAZARD CLASS NUMBER and DESCRIPTION:	Corrosive Class 8
UN IDENTIFICATION NUMBER:	UN2735
PACKING GROUP:	II
DOT LABEL(S) REQUIRED:	Corrosive

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: 153

RQ QUANTITY: None

MARINE POLLUTANT: The components of this product are designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is considered as dangerous goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is considered by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act as follows:

SARA 313 Reporting: Nonyl phenol CAS# 84852-15-3

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted form listing.

OTHER U.S. FEDERAL REGULATIONS: None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Ingredients within this product are not on the Proposition 65 Lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Complies with WHMIS 2015

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

See Section 2 for Details

AUSTRALIAN INFORMATION FOR PRODUCT: The components of this product are listed on the International Chemical Inventory list.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

JAPANESE ENCS INVENTORY: The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

16. OTHER INFORMATION

ABBREVIATIONS AND ACRONYMS:

EPA: United States Environmental Protection Agency
ARD: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)

PREPARED BY: Paul Eigbrett – (**GHS MSDS Compliance PLUS)**

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. Bayvex Technologies assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Bayvex Technologies assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

END OF SDS SHEET