

SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Plastic Process MNB01, MNB05, MNB55 Non-Chlorinated Bulk Mold Cleaner

Product Code: MNB55

Chemical Type: Solvent Blend

Product Use: MNB 55 is a non-chlorinated mold cleaner. Designed to be used as is and can be applied by spray brush or wiping.

Manufacturer: Plastic Process Equipment, Inc. **Revision Date:** 1/9/2015

Address: 8303 Corporate Park, Dr,
Macedonia, OH 44056

Emergency: (800) 424-9300
Phone: 216 367 7000

NOTE: The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Plastic Process Equipment Inc provides this information as guidance for providing personal protection to your employees. The user has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. The user must meet all applicable safety and health standards.

2. Hazards Identification

Emergency Overview

Form: Liquid **Physical state:** Liquid **Color:** Colorless **Odor:** Mild, Hydrocarbon

GHS Classification:

Classified Hazards Other Hazards
Flammable liquids (Category 3), H226
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411
Aspiration hazard, Category 1

Electrostatic charge may be generated during pumping and other operations

GHS-Labeling

Symbol(s) :



Signal Word : Danger

Hazard Statements :

Highly flammable liquid and vapor
Causes skin irritation
May be fatal if swallowed and enters airways
May cause drowsiness or dizziness
Very toxic to aquatic life with long lasting effects

Precautionary Statements :

Keep away from heat/sparks/open flames/hot surfaces. - No smoking; Ground/bond container and receiving equipment; Use only non-sparking tools; Take precautionary measures against static discharge; Avoid breathing dust/fume/gas/mist/vapors/spray; Wash thoroughly after handling; Use only outdoors or in a well-ventilated area; Avoid release to the environment; Wear protective gloves / protective clothing / eye protection / face protection;

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician; Do NOT induce vomiting;

IF ON SKIN: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower;

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing; Call a POISON CENTER or doctor/physician if you feel unwell;

Take off contaminated clothing and wash before reuse; In case of fire: Use dry chemical, carbon dioxide, or foam for extinction; Collect spillage; Store in a well-ventilated place. Keep container tightly closed; Dispose of contents/container to approved disposal facility

Target Organs: Eyes, Skin, Respiratory system, Central nervous system, Heart

Aggravated Medical Condition: Skin disorders, Eye disorders, Cardiac irregularities, Respiratory disorders, Asthma

NOTICE: Reports have associated repeated and prolonged OVEREXPOSURE to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this package may be harmful or fatal.

3. Composition / Information on Ingredients

MATERIAL	CAS#	WT %
Acetone	67-64-1	5-13
Heptanes	426260-76-6	55-64
Xylenes	1330-20-7	25-35
Ethyl Benzene	100-41-4	0-10

4. First Aid Measures

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

5. Fire Fighting Measures

Flash point : -16 C / 2 F (TCC)

Suitable extinguishing media: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical.

Unsuitable extinguishing media: High volume water jet.

Specific hazards during fire fighting: Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for fire-fighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Fire and explosion protection: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

6. Accidental Release Measures

Spill or Leak Instructions

Personal precautions : Use personal protective equipment. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations

7. Handling and Storage

Handling: FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN

Handling

Advice on safe handling: Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary, but may not by themselves be sufficient. Review all operations, which have the potential to generating and accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing,

agitation, and vacuum truck operations) and use appropriate mitigating procedures. Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited

in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage: Requirements for storage areas and containers: No smoking. Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards

8. Exposure Controls / Personal Protection

MATERIAL	CAS#	TWA (OSHA) TLV (ACGIH)	
Acetone	67-64-1	750 ppm	500 ppm A4
Heptanes	426260-76-6	500 ppm	400 ppm
Xylenes	1330-20-7	100 ppm	100 ppm
Ethyl benzene	100-41-4	100 ppm	20 ppm

MATERIAL	CAS#	CEILING	STEL(OSHA/ACGIH)	HAP
Acetone	67-64-1	None Known	750 ppm	No
Heptanes	426260-76-6	None Known	500 ppm	No
Xylenes	1330-20-7			Yes
Ethyl benzene	100-41-4			Yes

In addition, using manufacturers' data, based on EPA Method 311, the following EPA Hazardous Air Pollutants may be present in trace amounts (less than 0.1%): Benzene, Mixed Xylenes, Ethylbenzene

PEL= Permissible Exposure Limits
 TLV= Threshold Limit Value
 EL= Excursion Limit

TWA= Time Weighted Average (8 hr.)
 STEL= Short Term Exposure Limit (15 min.)
 WEEL= Workplace Environmental Exposure Level

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Other Suggested Equipment: Eye wash station and emergency showers should be available. Spill containment equipment should be available.

Discretion Advised: Plastic Process Equipment Inc. takes no responsibility for determining what measures are required for personal protection in any specific application. The general information should be used with discretion.

9. Physical and Chemical Properties

Boiling Point: 133 F initial

Vapor Density: 4(Air=1)

Odor/Appearance: Clear liquid

Specific Gravity: 0.7

Water Solubility: Nil

Evaporation Rate: >1 (NBA=1)

10. Stability and Reactivity

Conditions to avoid: Heat, flames and sparks. Keep away from direct sunlight.

Materials to avoid: Acids, Aldehydes, Alkalies, Amines, Ammonia, Oxidizing agents, Reducing agents, Chlorine compounds. May form explosive mixtures with chromic anhydride, chromyl alcohol, hexachloromelamine, hydrogen peroxide, permonosulfuric acid, potassium tertbutoxide, and thioglycol.

Hazardous decomposition products: In case of fire hazardous decomposition products may be produced such as: Carbon monoxide, Carbon dioxide (CO₂)

Hazardous reactions: Hazardous polymerization does not occur. Stable under normal conditions.

11. Toxicological Information

Acetone

Acute oral toxicity : LD50: 5,800 mg/kg Species: rat

Acute inhalation toxicity : LC50: 32000 ppm Exposure time: 4 h Species: rat

Acute dermal toxicity : LD50: > 7,426 mg/kg Species: guinea pig

Skin irritation : Species: rabbit Result: Mild skin irritation Exposure time: 24 h

Eye irritation : Species: rabbit Result: Irritating to eyes. Method: Draize Test

Repeated dose toxicity :

Species: rat NOEL: 19000 ppm

Note: 8-Week Inhalation Toxicity Study 5 days/week for 8 weeks Slightly reduced weight gain compared to controls

Species: rat NOEL: 100 mg/kg

Note: 90-Day Oral Toxicity Study increased liver and kidney weights

Species: rat Lowest observable effect level: 500 mg/kg

Note: 90-Day Oral Toxicity Study increased liver and kidney weights

Carcinogenicity

WARNING! This product contains a chemical known to the State of California to cause cancer. Benzene 71-43-2, Acetaldehyde 75-07-0, Cumene 98-82-8

Reproductive toxicity

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Toluene 108-88-3, Benzene 71-43-2

Heptanes

LC50/LD50 Data

Dermal Unlikely to be harmful > 2 g/kg (estimated)

Oral Unlikely to be harmful > 5 g/kg (estimated)

Inhalation Unlikely to be harmful 60 mg/L (vapor)

Aspiration Hazard: May be fatal if swallowed and enters airways.

Skin Corrosion/Irritation: Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Serious Eye Damage/Irritation: Causes mild eye irritation.

Symptoms of Overexposure: Overexposure to vapors may result in respiratory tract irritation, coughing, nausea, headaches, vomiting, and CNS depression.

Incompatible materials: Avoid contact with strong oxidizing agents and strong reducing agents.

Skin Sensitization: No information available.

Reactivity: Not chemically reactive.

Respiratory Sensitization: No information available.

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness and dizziness.

Hazardous decomposition products: Not anticipated under normal conditions of use.

Specific Target Organ Toxicity (Repeated Exposure): Inadequate information available.

Carcinogenicity: No information available.

Chemical stability: Stable under normal ambient and anticipated conditions of use.

Germ Cell Mutagenicity: Inadequate information available.

Reproductive Toxicity: Inadequate information available.

Xylene

Xylene contains small amounts of benzene a known carcinogen which may produce blood changes which include reduced platelets, reduced red blood cells, reduced white blood cells, aplastic anemia, and acute nonlymphocytic anemia.

Xylene contains Ethylbenzene, both have been related to fetotoxicity, liver and kidney injury. Exposure of pregnant rats during gestation to toluene at levels of 250 ppm or higher has produced some maternal toxicity and embryo/fetotoxicity. A lifetime inhalation study in rats did not show any toxic effects even at a high dose of 300 ppm. Behavioral signs of hearing loss were observed in rats exposed to toluene subchronically at levels of 1000 ppm or more. IARC has rated Xylene as a class 3 carcinogen

COMPONENT TOXICITY: Ethylbenzene, a component of this product, has been designated by the International Agency for Research on Cancer as "possibly carcinogenic to humans", based on increased tumor incidence in laboratory animals. Overexposure may lead to nervous system effects, including drowsiness, dizziness, nausea, headaches, paralysis, loss of consciousness and even death. Repeated overexposure has caused a hearing loss in laboratory animals. **NOTE TO PHYSICIAN:** Catecholamines and similar adrenergic drugs are generally contraindicated because of potential for increased sensitivity of the heart from hydrocarbon overexposure and subsequent ventricular fibrillation. EKG monitoring may be indicated and bronchodilators should be selected with care. Following injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss.

Xylene, all isomers

ACGIH (United States).

TWA: 100 ppm 8 hour(s). STEL: 150 ppm 15 minute(s).

OSHA (United States).

TWA: 100 ppm 8 hour(s).

Ethylbenzene

ACGIH (United States).

TWA: 100 ppm 8 hour(s). STEL: 125 ppm 15 minute(s).

OSHA (United States).

TWA: 100 ppm 8 hour(s).

BENZENE CAS: 71-43-2

< 1.0%

0.5 ppm ACGIH TWA

2.5 ppm ACGIH STEL

1 ppm OSHA PEL

5 ppm OSHA CEILING

10 LBS CERCLA 302.4 RQ

Other Comments: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage (sometimes referred to as Solvent or Painters' Syndrome). Intentional misuse by deliberately concentrating and inhaling this material may be harmful or fatal.

12. Ecological Information

AQUATIC ANIMAL INFORMATION:

The most sensitive known aquatic group to any component of this product is:

Tidewater Silversides 250 ppm or mg/L (24 hour exposure).

Keep out of sewers and natural water supplies.

The substance is toxic to aquatic organisms.

MOBILITY IN SOIL This material is a mobile liquid.

DEGRADABILITY This product is partially biodegradable.

13. Disposal Considerations

The information in this MSDS pertains only to the product as shipped. Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

14. Transport Information

Flammable Liquids N.O.S., 3, UN 1993, PGII NAERG #: 128

15. Regulatory Information

EPA REGULATION:

All components of this product are on the TSCA list.

SARA SECTION 311/312 HAZARDS: Acute Health, Chronic Health, Fire

SARA Title III Section 313 Supplier Notification

This product contains the indicated <*> toxic chemicals subject to the reporting requirements of

Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR

372. This information must be included in all MSDSs that are copied and distributed for this material.

INGREDIENTS	CAS#	WT% (REG.SECTION)	RQ(LBS)
Acetone	67-64-1	5-13% (311,312)	5000
Ethyl Benzene	100-41-4	0-10% (311,312,313,RCRA)	1000
Xylene	1330-20-7	25-35% (311,312,313,RCRA)	1000
Heptanes	426260-76-6	55-64% (311,312)	

Any release equal to or exceeding the RQ must be reported to the National Response Center

(800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR

302.6 and 40 CFR 355.40 respectively. Failure to report may result in substantial civil and criminal penalties. State & local regulations may be more restrictive than federal regulations.

STATE REGULATIONS:

California Prop. 65 :

Warning: This material may contain detectable quantities of the following chemicals, known to the State of California to cause cancer, birth defects or other reproductive harm, and which may be subject to the warning requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

16. Other Information

Hazard ratings This information is intended solely for the use of individuals trained in the NFPA and/or HMIS systems.

NFPA: Health: 3 Flammability: 3 Reactivity: 0

HMIS: Health: 3 Flammability: 3 Reactivity: 0

RATING: 4-EXTREME 3-HIGH 2-MODERATE 1-SLIGHT 0-INSIGNIFICANT

Note:

For industrial use only. The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Plastic Process Equipment Inc makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid, or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards. Possession of an MSDS does not indicate that the possessor of the MSDS was a purchaser or user of the subject product.