



Safety Data Sheet

Part Number: **9016485, 9015145, 9016488**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: ChemXP™-Nov Primer B

Chemical Family: Modified Cycloaliphatic Amine

Product Use: Coating / Polymerization Catalyst

Restrictions on Use: Use only as intended.

Manufacturer: Tennant Company
701 North Lilac Drive
P. O. Box 1452
Minneapolis, MN 55440-1452
Phone: 1-763-540-1200

24-Hour Emergency Phone Number: North America: 800-424-9300 (CHEMTREC)
International: 703-527-3887 (CHEMTREC) Collect Calls Accepted

2. HAZARD IDENTIFICATION

GHS Classifications

Health Hazards

Acute Toxicity, Oral, Category 4
Acute Toxicity, Inhalation, Category 3*
Skin Corrosion, Category 1B
Serious Eye Damage, Category 1
Skin Sensitization, Category 1B

Physical Hazards

Corrosive to Metals, Category 1

Environmental Hazards

Acute Aquatic Toxicity, Category 3

Safety Data Sheet

Part Number: **9016485, 9015145, 9016488**

GHS Labeling

Pictograms:



Signal Word: Danger!

Hazard Statements

H290: May be corrosive to metals
H303: Can be harmful if swallowed
H311: Toxic in contact with skin
H314: Causes severe skin burns and eye damage
H317: May cause an allergic skin reaction
H318: Causes serious eye damage
H402: Harmful to aquatic life

Precautionary Statements

Prevention:

P234: Keep only in original container.
P260: Do not breathe vapours.
P261: Avoid breathing vapours.
P264: Wash hands and exposed areas thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER or doctor/physician.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P321 + P322: Specific treatment & measures (see First Aid Section of this SDS).
P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.
P390: Absorb spillage to prevent material damage.

Safety Data Sheet

Part Number: **9016485,9015145, 9016488**

Storage:

P405: Store locked up.

P406: Store in corrosive resistant/container with a resistant liner.

Disposal:

P501: Dispose of contents/container in accordance with local, regional, and federal regulations

* < 25% of this product consists of ingredients of unknown acute inhalation toxicity

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical characterization

Modified Cycloaliphatic Amine

Component*	CAS #	Weight %
Benzyl Alcohol (Phenylmethanol)	100-51-6	50 – 70
Isophorone Diamine (IPD; 3-Aminomethyl-3,5,5-trimethylcyclohexylamine)	2855-13-2	15 – 25
Benzene-1,3-dimethaneamine (MXDA; m-Xylylenediamine)	1477-55-0	5 – 15

*The above listed components are OSHA hazardous materials which contribute to this products' GHS Hazard Categorization as prescribed in OSHA's Hazard Communication 29 CFR 1910.1200.

4. FIRST AID MEASURES:

Inhalation

Symptoms & Effects: Nose, throat and lung irritation, respiratory tract irritation, headache, nausea, dizziness, confusion, breathing difficulty, serious damage to the lungs, delayed lung injury, and respiratory failure

Measures: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Immediately call a POISON CENTER or doctor/physician.

Skin Contact

Symptoms & Effects: Skin irritation, redness, burning sensation, drying, headache, nausea, dizziness, confusion

Measures*: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes while washing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. If skin irritation or rash occurs, seek additional medical advice/attention.

*NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

Safety Data Sheet

Part Number: **9016485, 9015145, 9016488**

Eye Contact

Symptoms & Effects: Severe eye irritation, temporary hazed or unclear vision, corneal edema, eye burns, stinging sensation, and blindness

Measures: Immediately rinse eyes with water for at least 15 minutes. Remove contact lenses after the initial few minutes and if easy to do so and resume rinsing. Rinse beneath eyelids by holding eyelids apart with clean fingers while rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion

Symptoms & Effects: Severe burns of the mouth and throat, headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties, stomach or intestinal irritation, danger of perforation of the esophagus and stomach.

Measures: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel. Victim should rinse mouth thoroughly if conscious and easy to do so. If the victim is drowsy or unconscious, do not give anything by mouth. Prevent aspiration of vomit. Place individual on their left side and place their head down. Do not leave victim unattended.

5. FIRE FIGHTING MEASURES

Flash Point: > 212°F (> 100°C)

Suitable Extinguishing Media: Alcohol-resistant foam, Carbon dioxide, Dry chemical, Dry sand, Limestone powder

Unsuitable Extinguishing Media: None identified

Hazardous Combustion Products: Nitric Acid, Ammonia, Nitrogen Oxides, Aldehydes, Flammable hydrocarbon fragments, Organic acid vapors, Carbon monoxide, Carbon dioxide

Protective Equipment for Fire-Fighters: Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

Precautions for Fire-Fighters: May generate ammonia gases and toxic nitric oxide gases. Ammonia gas may be liberated at high temperatures. In cases of incomplete combustion, an increased formation of nitrogen oxides is to be expected. Downwind personnel must be evacuated. Do not allow run-off from firefighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES:

Protective Equipment: Recommended to wear chemical splash goggles & resistant gloves and discard of gloves that show tears, pinholes, or signs of wear. Wear proper garments to prevent skin exposure, such as long-sleeves and pants.



Safety Data Sheet

Part Number: **9016485,9015145, 9016488**

Personal Precautions: Persons not wearing proper PPE should be excluded from the area of contamination until clean-up has been completed. Ensure adequate ventilation.

Environmental Precautions: Do not allow discharge into drains, surface waters, or sanitary sewer system. Prevent spreading over a wide area by containment or barriers. Local authorities should be advised if significant spillages cannot be contained or if material discharges into drains or ground water.

Methods & Materials for Clean-Up: Avoid generation of vapours. Contain and collect spillage with non-combustible absorbent material such as sodium bicarbonate, sodium carbonate, calcium carbonate, clean sand or non-acidic clay and then dampen the mixture with water. Sweep or scoop up using non-sparking tools and place into suitable containers for prompt disposal according to proper federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling: Do not ingest, inhale, or expose eyes and skin to this product. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Do not cut, puncture, or weld on or near the container. Avoid breathing vapors and/or aerosols. Avoid contact with skin and eyes. Use only in well-ventilated areas. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage: Store material locked up in either the original container or in a corrosive resistant/container with a resistant liner, away from incompatible materials.

Incompatible Materials: Sodium hypochlorite, Organic acids, Mineral acids, Peroxides, Amines, Bases, Reducing agents, Reactive metals (e.g. sodium, calcium, zinc, etc.), Oxidizing agents, Materials reactive with hydroxyl compounds

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Limits :

Exposure limits have not been established for this product.

Component Exposure Limits :

Benzyl Alcohol

	CAS # 100-51-6	
OSHA	Permissible Exposure Limit (PEL)	None Established
ACGIH	Threshold Limiting Value (TLV)	None Established
NIOSH	Recommended Exposure Limit (REL)	None Established
WEEL	Time Weighted Average (TWA)	10 ppm (44 mg/m ³)

Safety Data Sheet

Part Number: **9016485, 9015145, 9016488**

Benzene-1,3-Dimethanecamine (MXDA)	CAS # 1477-55-0	
OSHA	Permissible Exposure Limit (PEL)	None Established
ACGIH	Threshold Limiting Value (TLV)	0.1 mg/m ³
NIOSH	Recommended Exposure Limit (REL)	0.1 mg/m ³

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below permissible exposure limits. Provide readily accessible eye wash stations and safety showers.

Occupational Exposure Controls: Ensure adequate ventilation, especially in confined areas. Consider all potential hazards of this material, applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting PPE. Ensure that eyewash stations and safety showers are proximal to the work location. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Protective and Hygiene measures: Wash hands before breaks and immediately after handling product. When using, do not eat, drink, or smoke. In case of clothes contamination, remove and wash contaminated clothing before re-use. Discard of contaminated leather articles.

Eye Protection: Recommended to wear chemical splash goggles at all times when using this product. Have a suitable eye wash station or bottle nearby in case of splashing into the eyes.

Hand Protection: Recommended to wear suitable resistant gloves and discard of gloves that show tears, pinholes, or signs of wear. Suitable gloves will be based on product use and the period of use, and may include neoprene, butyl-rubber, nitrile rubber, etc.

Skin Protection: Recommended to impervious clothing, such as a full rubber suit, rubber or plastic boots, a slicker suit, and/or long-sleeved clothing, pants and proper foot covering in order to prevent direct skin contact with the product. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Respiratory Protection: A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Safety Data Sheet

Part Number: **9016485, 9015145, 9016488**

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light yellow liquid

Odor: Amine / Fishy

Odor Threshold: No data available

pH: > 7

Melting/freezing point: No data available

Boiling point: > 392°F (> 200°C)

Boiling range: No data available

Flash point (Tag closed cup): > 212°F (> 100°C)

Evaporation rate: No data available

Flammability: Lower Limit: No data available **Upper Limit:** No data available

Vapor pressure: 10.34 mmHg @ 70°F (21°C)

Vapor density: No data available

Relative density: 1.05 g/cm³ (8.75 lb/gal) @ 70°F (21°C)

Solubility in water: Insoluble

Partition coefficient (n-octanol/water): No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity (dynamic): No data available

10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur as long as material is not exposed to incompatible materials.

Conditions to Avoid: Excessive heat, Exposure to incompatible materials, Metals

Incompatible Materials: Sodium hypochlorite, Organic acids, Mineral acids, Peroxides, Amines, Bases, Reducing agents, Reactive metals (e.g. sodium, calcium, zinc, etc.), Oxidizing agents, Materials reactive with hydroxyl compounds

Hazardous decomposition products: Nitric Acid, Ammonia, Nitrogen Oxides, Aldehydes, Flammable hydrocarbon fragments, Organic acid vapors, Carbon monoxide, Carbon dioxide

Safety Data Sheet

Part Number: **9016485,9015145, 9016488**

11. TOXICOLOGICAL INFORMATION

Primary Routes of Exposure: Inhalation, Eye contact, Ingestion, Skin contact

Symptoms Related to Physical, Chemical and Toxicological Characteristics: Nose, throat and lung irritation, respiratory tract irritation, headache, nausea, dizziness, confusion, breathing difficulty, serious damage to the lungs, delayed lung injury, and respiratory failure
Severe burns of the mouth and throat, headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties, stomach or intestinal irritation, danger of perforation of the esophagus and stomach.

Delayed and Immediate Effects & Chronic Effects from Exposure: The substance may result in skin sensitization or allergic reactions in the skin if continually exposed to the skin. This substance is not a suspected carcinogen (see below).

Measures of Toxicity:

Acute toxicities are calculated based on component toxicities

Mixture: Acute Oral Toxicity: LD₅₀ Rat: 1,000 mg/kg

Acute Dermal Toxicity: LD₅₀ Rabbit: 2,800 mg/kg

Acute Inhalation Toxicity: LC₅₀ Rat: 2.75 mg/l

Carcinogen Claims:

OSHA: **No**

International Agency for Research on Cancer (IARC): **No; 4 [Probably not carcinogenic]**

ACGIH: **No; A5 [Not Suspected]**

National Toxicology Program (NTP) Report on Carcinogens: **No**

12. ECOLOGICAL INFORMATION

Ecotoxicity: This substance is slightly toxic to aquatic organisms. It is strongly advised that this substance does not enter the environment.

Persistence & Degradability: No data available

Bio-accumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State or Local regulations.

Contaminated packaging should be emptied as far as possible before disposal.

Safety Data Sheet

Part Number: **9016485,9015145, 9016488**

14. TRANSPORT INFORMATION

DOT SHIPPING CLASSIFICATION:

UN NUMBER: UN2735

PROPER SHIPPING NAME: Amines, liquid, corrosive, n.o.s., (Benzene-1,3-dimethaneamine [MXDA], 3-Aminomethyl-3,5,5-trimethylcyclohexylamine [IPD])

TRANSPORTATION HAZARD CLASS: 8

PACKING GROUP: III

HAZARD LABEL CODE: 8

IMDG (Marine) SHIPPING CLASSIFICATION:

IMDG CODE: 8

UN NUMBER: UN2735

MARINE POLLUTANT: No

EmS: F-A, S-B

IMDG PACKING GROUP: III

HAZARD LABEL: 8

Description of the goods

AMINES, LIQUID, CORROSIVE, N.O.S., (Benzene-1,3-dimethaneamine [MXDA], 3-Aminomethyl-3,5,5-trimethylcyclohexylamine [IPD])

IATA (Air) SHIPPING CLASSIFICATION:

ICAO/IATA-DGR: 8

UN NUMBER: UN2735

HAZARD LABEL: Corrosive

IATA-packing instructions – Passenger: 852

IATA -max. quantity – Passenger: 5L

IATA – packing instructions – Cargo: 856

IATA –max. quantity – Cargo: 60L

IAO packing group: III

Limited quantity Passenger: Y841 / 1L

Description of the goods

Amines, liquid, corrosive, n.o.s., (Benzene-1,3-dimethaneamine [MXDA], 3-Aminomethyl-3,5,5-trimethylcyclohexylamine [IPD])

15. REGULATORY INFORMATION

All components of this product conform to the following national inventory requirements: US TSCA, EU EINECS and Canada DSL



Safety Data Sheet

Part Number: **9016485,9015145, 9016488**

SARA Title III

Section 302 – Extremely Hazardous Chemicals

The following ingredients are subject to the supplier notification requirements of Section 302 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 37

None Listed

Section 313 – Toxic Chemicals

The following ingredients are subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 37

None Listed

OTHER FEDERAL REGULATIONS

Components of this product are subject to RCRA Hazardous Waste requirements, Clean Air Act (CAA) Hazardous Air Pollutants requirements and OSHA Process Safety Management (PSM) high hazard requirements.

CANADIAN REGULATIONS

WHMIS Classification: D2B, E (Based on components)

STATE REGULATIONS

California Proposition 65

This product does not contain chemicals known to the state of California to cause cancer, birth defects, and other reproductive harm.

Other State Regulations

The components of this product may be included on the various state hazardous materials lists noted below.

- California Hazardous Substances List
- Delaware Air Quality Management List
- Idaho Air Pollutants List
- Illinois Toxic Air Contaminants List
- Maine Hazardous Air Pollutants List
- Massachusetts Hazardous Substances List
- Michigan Critical Materials List
- Minnesota Hazardous Substances List
- New Jersey RTK Hazardous Substances List
- New Jersey TCPA Extremely Hazardous Substances List
- New York List of Hazardous Substances
- North Carolina Toxic Air Contaminants List
- Pennsylvania Hazardous Substances List
- Washington Permissible Exposure Air Contaminants List



Safety Data Sheet

Part Number: **9016485, 9015145, 9016488**

West Virginia Air Toxic Pollutants List
Wisconsin Hazardous Air Contaminants List

Note: Entries under Section 15 are not intended to be all inclusive of Federal and State laws and regulations. Please consult the appropriate agencies for further clarification of any requirements.

16. OTHER INFORMATION

This SDS conforms to the OSHA Hazard Communication Standard 1910.1200 published in the Federal Register March 26, 2012

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

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