

# MATERIAL SAFETY DATA SHEET

## SECTION 01 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION:

Chemical Name: **NUFLEX® 454 MULTI-PURPOSE CONSTRUCTION ADHESIVE**

Manufacturer: **NUCO INC.**  
150 Curtis Drive  
Guelph, Ontario N1K 1N5  
Tel: (519)-823-4994  
Fax: (519)-823-1099  
Infotrac 24 Hour Emergency Tel: (800)-535-5053

Date: **March 25, 2014**

Prepared by: **Technical Services Department**

WHMIS Classification: **B2, D1B, D2A, E**

Product Use: **Construction Adhesive**

## SECTION 02 – COMPOSITION / INFORMATION ON INGREDIENTS:

<u>Ingredients</u>	<u>CAS No.</u>	<u>%</u>	<u>LD50 (Oral-Rat)</u>	<u>LC50(Inhalation-Rat)</u>
Oxydipropyl dibenzoate	27138-31-4	5 - 10	Not available	Not available
Methyl Acetate	79-20-9	10.0 – 25.0	>5,000 mg/kg	Not available
Morpholine	110-91-8	1.0 – 5.0	1,050 mg/kg	8,000 ppm (8 h)
Methanol	67-56-1	0.1 – 0.5	5,600 mg/kg	64,000 ppm
Vinyl Acetate	108-05-4	0.1 – 0.5	2,900 mg/kg	11,400 mg/m <sup>3</sup> (4 h)

The ingredients listed above are controlled products as defined in CPR, am. SOR/88-555 or 29 CFR 1910.1200

## SECTION 03 – HAZARDS IDENTIFICATION:

### ROUTES OF ENTRY INTO THE BODY (ACUTE EFFECTS):

Eyes: Direct contact can cause severe eye irritation.

Skin: May be harmful if absorbed through the skin. Can cause burns. Prolonged or repeated skin contact can dry skin and cause irritation.

Inhalation: Avoid breathing vapor or mists. Causes respiratory tract irritation. Contains a material which may cause cancer with the risk depending on duration and level of exposure. Vapors can readily accumulate in confined or poorly ventilated areas.

Ingestion: Low ingestion hazard in normal use. Harmful if swallowed. Corrosive to the digestive tract.

### WHMIS HAZARD SYMBOL(S):



**DANGER: EXTREMELY FLAMMABLE, VAPOR HARMFUL**

## SECTION 04 - FIRST AID MEASURES:

Eyes: Can cause severe eye irritation. Flush with copious quantities of lukewarm water. Do not attempt to physically remove the solids or gums from the eye. Seek medical attention immediately.

Skin: May be harmful if absorbed through skin. Remove contaminated clothing. Wash thoroughly with warm water and non-abrasive soap.

Inhalation: Remove to fresh air. Seek medical attention if you feel ill or a reaction develops. If not breathing or breathing is irregular provide artificial respiration or oxygen by trained personnel.

Ingestion: Call poison control center immediately. Follow their specific instructions. Do not induce vomiting.

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**SECTION 05 - FIRE FIGHTING MEASURES:**

**Flammable Conditions:** VAPORS CAN IGNITE EXPLOSIVELY AND CAN CAUSE FLASH FIRE. Never use around sparks, flames or other sources of ignition.

**Extinguishing Media:** Carbon dioxide, dry chemical, water fog or foam. Water can be used to cool fire exposed containers to prevent pressure build-up and possible explosion.

**Fire Fighting Measures:** Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan.

**Flash Point:** 10°F(-12°C) - Setaflash

**Flammability Limits:** Lower Explosion Limit - Not available  
Upper Explosion Limit - Not available

**Autoignition Temperature:** Not available

**Hazardous Decomposition Products:** Carbon oxides and traces of incompletely burned carbon products.

**Sensitivity - Impact:** Not available

**Static:** Not available

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**SECTION 06 - ACCIDENTAL RELEASE MEASURES:**

**Containment / Clean Up:** Restrict access to the area of the spill to personnel with suitable training. Provide ventilation and protective clothing. Scrape up adhesive (use non-sparking equipment) and place in container for disposal. Cleaning may require detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state, provincial, federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup.

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**SECTION 07 - HANDLING AND STORAGE:**

**Handling and Storage:** Store under dry conditions, below 110°F (43°C) and keep container tightly sealed when not in use. Use only in well ventilated area. Containers may retain product residues and vapors. Store large quantities in buildings designed and protected for storage of NFPA Class 1-B flammable materials.

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**SECTION 08 - EXPOSURE CONTROL / PERSONAL PROTECTION:**

**Component Exposure Limits:** Methyl Acetate (CAS# 79-20-9): Provide adequate ventilation to control exposures within the following exposure guidelines: ACGIH TLV: 200 ppm and OSHA PEL: 200 ppm.  
Diethylene Oximide (CAS# 110-91-8): Provide adequate ventilation to control exposures within the following exposure guidelines: ACGIH TLV: 20 ppm and OSHA PEL: 20 ppm.  
Methanol (CAS# 67-56-1): Provide adequate ventilation to control exposures within the following exposure guidelines: ACGIH TLV: 200 ppm and OSHA PEL: 200 ppm.  
Vinyl Acetate (CAS# 108-05-4): Provide adequate ventilation to control exposures within the following exposure guidelines: ACGIH TLV: 10 ppm and OSHA PEL: 10 ppm.

**Respiratory:** Wear an organic vapor NIOSH / MSHA approved respirator.

**Ventilation:** In indoor applications, passive ventilation (opening of doors and windows) is recommended. Local exhaust as necessary to keep exposure levels within guidelines.

**Personal Protective Equipment:** Safety glasses with side-protection, impermeable gloves (e.g., neoprene, nitrile, silver shield (R)), coveralls or apron are important in preventing contamination of eyes, skin and clothing. Wash thoroughly after handling. Facilities storing or utilizing this product should be equipped with an eyewash facility and a safety shower.

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**SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES:**

Physical State:	Mastic
Odor and Appearance:	Solvent odor, beige color
Odor Threshold:	Not available
Specific Gravity:	1.34
Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Faster than n-butyl acetate
Boiling Point:	130°F (54°C)
Freezing Point:	Not available
pH:	Not applicable
Coeff. Oil/Water Distribution:	Not available

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**SECTION 10 – STABILITY AND REACTIVITY:**

Chemical Stability:	Stable
Incompatible Materials:	Strong oxidizing agents, acids and bases.
Reactive Conditions:	Heat, sparks and open flame.
Hazardous Polymerization:	Will not occur under normal conditions of storage and use.

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**SECTION 11 - TOXICOLOGICAL INFORMATION:**

Effects of overexposure:	Repeated and prolonged overexposure can result in respiratory tract irritation and coughing. May cause damage to the kidneys, lungs, liver, mucous membranes, peripheral nervous system, skin, central nervous system, upper respiratory tract, and nose/sinuses. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
Sensitization:	No known significant effects or critical hazards.
Carcinogenicity:	Diethylene Oximide (CAS# 110-91-8) is listed under IARC Group 3: Not classifiable as to carcinogenicity to humans and ACGIH A4: Not classifiable as a Human Carcinogen. Vinyl Acetate (CAS# 108-05-4) is listed under IARC group 2B: Possibly Carcinogenic to Humans and ACGIH A3: Animal Carcinogen.
Reproductive Toxicity:	No known applicable information.
Teratogenicity:	No known applicable information.
Mutagenicity:	No known applicable information.
Synergistic Products:	No known applicable information.

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**SECTION 12 – ECOLOGICAL INFORMATION:**

Air:	Complete information is not yet available.
Water:	Aquatic ecotoxicity data is available by contacting NUCO Inc.
Soil:	Complete information is not yet available.

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**SECTION 13 – DISPOSAL CONSIDERATIONS:**

Waste Disposal:	Dispose in accordance with Federal, State / Provincial and local regulations.
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**SECTION 14 - TRANSPORT INFORMATION:**

Shipping Information:	<b>DOT CLASSIFICATION:</b> UN Number 1133, Class ORM-D; Packing Group III, Shipping Name - Consumer Commodity <b>TDG CLASSIFICATION:</b> UN Number 1133, Class 3, Packing Group III, Shipping Name - ADHESIVES, Containing Flammable Liquid, Limited Quantity. <b>IATA-DGR CLASS:</b> UN Number ID8000, Class 9, Packing Group III, Shipping Name – Consumer Commodity. <b>IMDG Class:</b> UN Number 1133, Class 3, Packing Group III, Shipping Name - ADHESIVES, Containing Flammable Liquid, Limited Quantity.
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**SECTION 15 - REGULATORY INFORMATION:**

TSCA Inventory Status:	Chemical components listed on TSCA inventory except as exempted.
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<b>NFPA Profile:</b>	<b>Health 2, Flammability 3, Reactivity 0</b>
<b>SARA TITLE III Chemical Listings:</b>	<b><u>Section 302 Extremely Hazardous Substances:</u> None</b> <b><u>Section 304 CERCLA Hazardous Substances:</u> Methyl acetate; diethylene oximide.</b> <b><u>Section 312 Hazard Class:</u> Acute: Yes; Chronic: Yes; Fire: Yes; Pressure: No; Reactive: No</b> <b><u>Section 313 Toxic Chemicals:</u> This product contains the following toxic chemicals which are subject to reporting under Section 313 (40 CFR Part 372): 1 - 5% diethylene oximide (CAS# 110-91-8); 0.1 – 0.5% vinyl acetate (CAS# 108-05-4).</b>
<b>DEA List I Precursor Chemicals:</b>	<b>Not listed</b>
<b>DEA List II Essential Chemicals:</b>	<b>Not listed</b>
<b>Chemical Weapons Convention List:</b>	
<b>Schedule I Chemicals:</b>	<b>Not listed</b>
<b>Schedule II Chemicals:</b>	<b>Not listed</b>
<b>Schedule III Chemicals:</b>	<b>Not listed</b>
<b>State Substance List:</b>	<b>This product contains a listed substance(s) that appears on one or more of the Substance Lists for Pennsylvania, Massachusetts and New Jersey: methyl acetate (CAS# 79-20-9); diethylene oximide (morpholine, CAS# 110-91-8); vinyl acetate (CAS# 108-05-4); and acetic acid (CAS# 64-19-7).</b>
<b>California Proposition 65 List:</b>	<b>None known</b>
<b>Regulatory Volatile Organic Content:</b>	<b>VOC less water, less exempt compounds and LVP-VOCs: 36.3 grams per liter (2.7% by weight).</b>
<b>Domestic Substance List:</b>	<b>Chemical components listed on DSL except as exempted.</b>
<b>Alberta, Ontario and Quebec Designated Substances:</b>	<b>None of the components are listed.</b>
<b>Canadian ARET:</b>	<b>None of the components are listed.</b>
<b>Canadian NPRI:</b>	<b>None of the components are listed.</b>

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**SECTION 16 - OTHER INFORMATION:**

The information herein is given in good faith, but no warranty, express or implied, is made. Product users should make independent judgements of the suitability of this information to ensure proper use and to protect the health and safety of employees.

Form: MSDS 454 MULTI-PURPOSE CONSTRUCTION ADHESIVE Rev.: 9 Date: 03/14