



## Nuflex® 456

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Nuflex® 456
<b>Other Means of Identification</b>	Heavy Duty Construction Adhesive
<b>Recommended Use</b>	Construction Adhesive.
<b>Restrictions on Use</b>	None known.
<b>Manufacturer</b>	NUCO Inc., 150 Curtis Dr., Guelph, Ontario, N1K 1N5, Canada, (519) 823-4994, www.sealantcentre.com
<b>Emergency Phone No.</b>	Infotrac 24 Hour Emergency Tel, (800) 535-5053
<b>Date of Preparation</b>	September 08, 2017

### SECTION 2. HAZARD IDENTIFICATION

#### Classification

Flammable liquid - Category 2; Eye irritation - Category 2A; Carcinogenicity - Category 2; Specific target organ toxicity (single exposure) - Category 3

#### Label Elements



Signal Word:

Danger

Hazard Statement(s):

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Precautionary Statement(s):

Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Use explosion-proof equipment.

Use non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use only outdoors or in a well-ventilated area.

Wash hands and skin thoroughly after handling.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Response:

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IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
IF exposed or concerned: Get medical advice or attention.

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

#### Other Hazards

Health Hazards Not Otherwise Classified (HHNOC): Repeated exposure may cause skin dryness or cracking.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Methyl acetate	79-20-9	25.0-50.0	Methyl Ethanoate	
n-Hexane	110-54-3	1.0-5.0	Hexane	
Vinyl acetate	108-05-4	0.1-0.5	Vinyl Ethanoate	

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor. Avoid mouth-to-mouth contact by using a barrier device. If exposed or concerned, call a Poison Centre or doctor.

##### Skin Contact

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. Get medical advice or attention if you feel unwell or are concerned. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

##### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Immediately call a Poison Centre or doctor.

##### Ingestion

Rinse mouth with water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. If exposed or concerned, get medical advice or attention.

##### First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

#### Most Important Symptoms and Effects, Acute and Delayed

If inhaled: symptoms may include headache, nausea, dizziness, drowsiness and confusion.

If on skin: causes moderate to severe irritation.

If swallowed: can harm the nervous system.

If in eyes: causes moderate to severe irritation.

#### Immediate Medical Attention and Special Treatment

##### Target Organs

Nervous system, skin, respiratory system, eyes.

##### Special Instructions

Not applicable.

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## Medical Conditions Aggravated by Exposure

None known.

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire. Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

#### Unsuitable Extinguishing Media

None known.

### Specific Hazards Arising from the Product

Extremely flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

### Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a safe distance or a protected location. Use water spray to dilute spills to non-flammable mixtures. Use water spray to flush spills away from ignition sources. Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Non-emergency personnel: evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Eliminate all ignition sources if safe to do so.

Emergency responders: use the personal protective equipment recommended in Section 8 of this safety data sheet.

### Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway. Minimize the use of water to prevent environmental contamination.

### Methods and Materials for Containment and Cleaning Up

Stop or reduce leak if safe to do so. Do not use absorbents. Contain spill using noncombustible material such as vermiculite, earth or sand. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product. Review Section 13 (Disposal Considerations) of this safety data sheet.

### Other Information

Report spills to local health, safety and environmental authorities, as required.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Obtain special instructions before use. Do not breathe in this product. Prevent all skin contact. Avoid repeated or prolonged skin contact. Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Prevent uncontrolled release of product. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use non-sparking tools. Wear personal protective equipment to avoid direct contact with this chemical. Keep containers tightly closed when not in use or empty.

### Conditions for Safe Storage

Store in an area that is: cool, temperature-controlled, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, secure and separate from work areas, separate from incompatible materials (see Section 10: Stability and Reactivity). Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Methyl acetate	200 ppm	250 ppm	200 ppm	Not established	Not established	Not established
n-Hexane	500 ppm	Not established	500 ppm	Not established	Not established	Not established
Vinyl acetate	10 ppm	15 ppm	Not established	Not established	Not established	5 ppm

### Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber, nitrile rubber, Viton®, Viton®/butyl rubber, Barrier® (PE/PA/PE), Silver Shield®.

#### Respiratory Protection

Wear a NIOSH approved air-purifying respirator with an organic vapour cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

Appearance	Light brown viscous paste.
Odour	Ethereal
Odour Threshold	Not available
pH	Not applicable
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	54.44 °C
Flash Point	-18 °C (closed cup)
Evaporation Rate	> 1 (n-butyl acetate = 1)
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.247
Solubility	Slightly soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	252 °C
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)

### Other Information

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## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions of use.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

### Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Incompatible materials.

### Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid).  
Not corrosive to metals.

### Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide.

## SECTION 11. TOXICOLOGICAL INFORMATION

Information presented below is for the entire product, unless otherwise specified.

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Methyl acetate		> 5000 mg/kg (rat)	> 5000 mg/kg (rabbit)
n-Hexane	48000 ppm (rabbit) (4-hour exposure)	15840 mg/kg (rat)	> 3295 mg/kg (rat)
Vinyl acetate		4880 mg/kg	

### Skin Corrosion/Irritation

May cause moderate or severe irritation based on information for closely related materials.

### Serious Eye Damage/Irritation

May cause serious eye irritation based on information for closely related materials. Symptoms include sore, red eyes, and tearing.

### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

May cause severe nose and throat irritation. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest. Depression of the central nervous system. Symptoms may include headache, nausea, dizziness, drowsiness and confusion.

#### Skin Absorption

No information was located.

#### Ingestion

No information was located.

### Aspiration Hazard

N-Hexane - Category 1.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause effects on the central nervous system.

### Respiratory and/or Skin Sensitization

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No information was located.

### Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Methyl acetate	Not Listed	Not designated	Not Listed	Not Listed
n-Hexane	Not Listed	Not designated	Not Listed	Not Listed
Vinyl acetate	Group 2B	A3	Not Listed	Not Listed

#### Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 2B = Possibly carcinogenic to humans.

ACGIH® = American Conference of Governmental Industrial Hygienists. A3 = Animal carcinogen.

### Reproductive Toxicity

#### Development of Offspring

No information was located.

#### Sexual Function and Fertility

No information was located.

#### Effects on or via Lactation

No information was located.

### Germ Cell Mutagenicity

No information was located.

### Interactive Effects

No information was located.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Methyl acetate	4080 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour; fresh water)			
n-Hexane	2.5 mg/L (Pimephales promelas (fathead minnow); 96-hour)	3.9 mg/L (48-hour)		0.89 mg/L (96-hour)
Vinyl acetate	15.7-22.0 mg/L (Lepomis macrochirus (bluegill); 96-hour)			

#### Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
n-Hexane	2.8 mg/L (Oncorhynchus mykiss (rainbow trout); 28-day)		4.9 mg/L (21-day)	

### Persistence and Degradability

No information was located.

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**Bioaccumulative Potential**

No information was located.

**Mobility in Soil**

No information was located.

**Other Adverse Effects**

There is no information available.

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water. Treat waste in an approved waste disposal facility. Empty containers retain product residue. Follow label warnings even if container appears to be empty.

**SECTION 14. TRANSPORT INFORMATION**

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1133	ADHESIVES, containing flammable liquid	3	III
Canadian TDG	1133	ADHESIVES, containing flammable liquid	3	III
IATA (Air)	1133	ADHESIVES, containing flammable liquid	3	III
IMO (Marine)	1133	ADHESIVES, containing flammable liquid	3	III

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15. REGULATORY INFORMATION****Safety, Health and Environmental Regulations**

None known.

**Canada****Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

All ingredients are listed on the DSL or are not required to be listed.

**USA****Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are listed on the TSCA Inventory.

**Additional USA Regulatory Lists**

Massachusetts Right To Know. (Methyl acetate). (n-Hexane). (Vinyl acetate)

New Jersey Right To Know. (Methyl acetate). (n-Hexane). (Vinyl acetate)

Pennsylvania Right To Know. (Methyl acetate). (n-Hexane). (Vinyl acetate)

SARA Title III - Section 302. (Vinyl acetate) 0.1-0.5% 1000lbs/ 129 gallons

SARA Title III - Section 311/312: Fire Hazard Acute Health Hazard Chronic Health Hazard

SARA Title III - Section 313. (n-Hexane) 1.0-5.0%. (Vinyl acetate) 0.1-0.5%

California Proposition 65: This product contains trace amounts of substances, in the form of airborne or unbound particles, known to the State of California to cause cancer or reproductive harm.

Methanol.

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## SECTION 16. OTHER INFORMATION

<b>NFPA Rating</b>	<b>Health - 2</b>	<b>Flammability - 3</b>	<b>Instability - 0</b>
<b>SDS Prepared By</b>	Technical Services Department		
<b>Phone No.</b>	519-823-4994		
<b>Date of Preparation</b>	September 08, 2017		
<b>Date of Last Revision</b>	April 20, 2018		
<b>Revision Indicators</b>	Revision 2		
<b>References</b>	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).		
<b>Disclaimer</b>	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.		

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