

## SAFETY DATA SHEET

### Arrowmate NPV

#### 1. Identification

##### Product identifier

Product name                    Arrowmate NPV  
 Product number                USA

##### Recommended use of the chemical and restrictions on use

Application                     Arrow Fletching Adhesive

##### Details of the supplier of the safety data sheet

Supplier                         Saunders Archery  
 1874 14<sup>th</sup> Avenue  
 Columbus, NE 68601  
 (402) 564-7176  
 (800) 228-1408  
[support@sausa.com](mailto:support@sausa.com)

Emergency telephone        INFOTRAC 352-323-3500 (#91845) 24 HR

#### 2. Hazard(s) identification

##### Classification of the substance or mixture

Physical hazards              Flam. Liq. 2 - H225

Health hazards                Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2A  
 - H319 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373

Environmental hazards      Not Classified

Human health                 The liquid may be irritating to eyes, respiratory system and skin. Symptoms following overexposure may include the following: Headache, Dizziness, Nausea, vomiting.

##### Label elements

##### Pictogram



Signal word                     Danger

Hazard statements            H225 Highly flammable liquid and vapor.  
 H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.  
 H361d Suspected of damaging the unborn child.  
 H373 May cause damage to organs through prolonged or repeated exposure.

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<b>Precautionary statements</b>	<p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P301+P310 If swallowed: Immediately call a poison center/doctor.</p> <p>P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</p> <p>P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p>
<b>Contains</b>	Acetone, Toluene, 2-Propanol, Methyl Ethyl Ketone

### Other hazards

This product does not contain any substances classified as PBT or vPvB.

### **3. Composition/information on ingredients**

#### Substances

##### Mixtures

<b>Acetone</b>	<b>30-60%</b>
CAS number: 67-64-1	
<b>Classification</b>	
Flam. Liq. 2 - H225	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2A - H319	
STOT SE 3 - H336	
<b>Toluene</b>	<b>10-30%</b>
CAS number: 108-88-3	
<b>Classification</b>	
Flam. Liq. 2 - H225	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Repr. 2 - H361d	
STOT SE 3 - H336	
STOT RE 2 - H373	
Asp. Tox. 1 - H304	

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<b>2-Propanol</b>	<b>5-10%</b>
CAS number: 67-63-0	
<b>Classification</b>	
Flam. Liq. 2 - H225	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
<b>Methyl Ethyl Ketone</b>	<b>1-5%</b>
CAS number: 78-93-3	
<b>Classification</b>	
Flam. Liq. 2 - H225	
Acute Tox. 4 - H332	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	

The Full Text for all Hazard Statements are Displayed in Section 16.

#### 4. First-aid measures

##### Description of first aid measures

<b>General information</b>	Remove affected person from source of contamination. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention if any discomfort continues.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.
<b>Ingestion</b>	Get medical attention immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Skin Contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Only remove contact lenses if the person is conscious, coherent and they can remove them themselves. If adhesive bonding occurs, do not force eyelids apart. Continue to rinse for at least 15 minutes. If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

##### Most important symptoms and effects, both acute and delayed

<b>Inhalation</b>	May cause coughing and difficulties in breathing. May cause eye and respiratory system irritation. Overexposure may depress the central nervous system, causing dizziness and intoxication.
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<b>Ingestion</b>	Aspiration hazard if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract. May Cause the following effects: Gastrointestinal symptoms, including upset stomach, Nausea, vomiting. Central nervous system depression. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.
<b>Skin contact</b>	May be absorbed through the skin. Product has a defatting effect on skin. The liquid is irritating to eyes and skin. Remove contaminated clothing. A single exposure may cause the following adverse effects: Dryness and/or cracking.
<b>Eye contact</b>	Causes serious eye irritation. Burns can occur. A single exposure may cause the following adverse effects: Pain. Conjunctivitis, irritation, tearing. Prolonged or repeated exposure may cause the following adverse effects: Irritation of eyes and mucous membranes. Prolonged contact causes serious eye and tissue damage.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

#### Special hazards arising from the substance or mixture

**Specific hazards** Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapors are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back.

#### Advice for firefighters

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8. No smoking, sparks, flames or other sources of ignition near spillage.

#### Environmental precautions

**Environmental precautions** Avoid discharge into drains. Contain spillage with sand, earth or other suitable non-combustible material.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Stop leak if possible without risk. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Provide adequate ventilation. Avoid inhalation of vapors. Use approved respirator if air contamination is above an acceptable level. Container must be kept tightly closed when not in use. Use explosion proof electric equipment. Avoid discharge into drains or watercourses or onto the ground.

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**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage precautions** Keep away from heat, sparks and open flame. Keep container tightly closed. Keep only in the original container.

### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## 8. Exposure Controls/personal protection

### Control parameters

#### Occupational exposure limits

##### **Acetone**

Long-term exposure limit (8-hour TWA): ACGIH 500 ppm

Short-term exposure limit (15-minute): ACGIH 750 ppm

A4

Long-term exposure limit (8-hour TWA): OSHA 1000 ppm 2400 mg/m<sup>3</sup>

Ceiling exposure limit: NIOSH: National Institute of Occupational Safety and Health 250 ppm 590 mg/m<sup>3</sup> vapour

##### **Toluene**

Long-term exposure limit (8-hour TWA): ACGIH 20 ppm

A4

Short-term exposure limit (15-minute): NIOSH: National Institute of Occupational Safety and Health 150 ppm 560 mg/m<sup>3</sup>

Ceiling Value: OSHA 300 ppm

Long-term exposure limit (8-hour TWA): OSHA 200 ppm

##### **2-Propanol**

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm 492 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): OSHA 400 ppm 980 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 400 ppm 984 mg/m<sup>3</sup>

A4

##### **Methyl Ethyl Ketone**

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm

Short-term exposure limit (15-minute): ACGIH 300 ppm

Long-term exposure limit (8-hour TWA): OSHA 200 ppm 590 mg/m<sup>3</sup>

Long-term exposure limit (8-hour TWA): NIOSH: National Institute of Occupational Safety and Health 200 ppm 590 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): NIOSH: National Institute of Occupational Safety and Health 300 ppm 885 mg/m<sup>3</sup>

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

### Exposure controls

#### Protective equipment



#### Appropriate engineering controls

This product must not be handled in a confined space without adequate ventilation. Avoid inhalation of vapors and spray/mists. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapor or mist.

#### Eye/face protection

Wear chemical splash goggles.

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<b>Hand protection</b>	Use protective gloves.
<b>Other skin and body protection</b>	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.
<b>Hygiene measures</b>	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
<b>Respiratory protection</b>	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. If exposure levels are likely to be exceeded, use a full face mask fitted with an organic AXP3 filter for short term low level exposures. For long term or high level exposures, compressed airline breathing apparatus should be used.

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Color</b>	Clear.
<b>Odor</b>	Solvent.
<b>Initial boiling point and range</b>	56°C/133°F @
<b>Flash point</b>	-16.99°C/1.42°F
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 1.2 g/100 g Upper flammable/explosive limit: 12.8 g/100 g
<b>Vapour density</b>	2.38
<b>Relative density</b>	0.86
<b>Solubility(ies)</b>	Moderate.
<b>Volatile organic compound</b>	This product contains a maximum VOC content of 307 g/l.

### 10. Stability and reactivity

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
<b>Possibility of hazardous reactions</b>	Will not polymerize.
<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Oxidizing agents. Reducing agents.
<b>Materials to avoid</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Hydrocarbons.

### 11. Toxicological Information

#### Information on toxicological effects

##### Acute toxicity - oral

ATE oral (mg/kg) 625.0

##### Acute toxicity - dermal

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ATE dermal (mg/kg) 1,375.0

### Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 13.0952381

### Toxicological information on ingredients.

#### Acetone

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 5,800.0

Species Rat

ATE oral (mg/kg) 500.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 20,000.0

Species Rabbit

ATE dermal (mg/kg) 1,100.0

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> dust/mlst mg/l) 76.0

Species Rat

ATE inhalation (vapours mg/l) 11.0

##### Specific target organ toxicity - single exposure

STOT - single exposure May cause drowsiness or dizziness

**Inhalation** Mucosal irritations. Absorption.

**Ingestion** Irritating. May cause nausea, stomach pain and vomiting. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

**Skin Contact** This product is moderately irritating. May be absorbed through the skin. Repeated exposure may cause skin dryness or cracking.

**Eye contact** This product is strongly irritating. Risk of corneal clouding.

**Route of entry** Inhalation Skin and/or eye contact

**Target Organs** Eyes

#### Toluene

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 636.0

Species Rat

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ATE oral (mg/kg)	500.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD <sub>50</sub> mg/kg)	12,124.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC <sub>50</sub> vapours mg/l)	28.1
Species	Rat
ATE inhalation (vapours mg/l)	11.0

**2-Propanol**

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD <sub>50</sub> mg/kg)	5,045.0
Species	Rat
ATE oral (mg/kg)	500.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD <sub>50</sub> mg/kg)	12,800.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC <sub>50</sub> vapours mg/l)	15,981.7
Species	Rat
ATE inhalation (vapours mg/l)	11.0
<u>Skin corrosion/irritation</u>	
Animal data	Slightly irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Irritating.
<u>Respiratory sensitization</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitization</u>	
Skin sensitisation	No information available.



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### Carcinogenicity

<b>Carcinogenicity</b>	Does not contain any substances known to be carcinogenic.
<b>IARC carcinogenicity</b>	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

### Specific target organ toxicity - single exposure

<b>STOT - single exposure</b>	May cause drowsiness or dizziness
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### Aspiration hazard

<b>Aspiration hazard</b>	No data available.
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### Medical Symptoms

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Central nervous system depression. Liver damage.

### Methyl Ethyl Ketone

#### Acute toxicity - oral

<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	2,737.0
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<b>Species</b>	Rat
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#### Acute toxicity - dermal

<b>Acute toxicity dermal (LD<sub>50</sub> mg/kg)</b>	6,480.0
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<b>Species</b>	Rabbit
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#### Acute toxicity - inhalation

<b>Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)</b>	32.0
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<b>Species</b>	Mouse
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<b>ATE inhalation (vapours mg/l)</b>	11.0
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#### Serious eye damage/irritation

<b>Serious eye damage/irritation</b>	Irritating.
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### Carcinogenicity

<b>Carcinogenicity</b>	Does not contain any substances known to be carcinogenic.
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### Aspiration hazard

<b>Aspiration hazard</b>	No data available.
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## 12. Ecological Information

## 13. Disposal considerations

### Waste treatment methods

<b>Disposal methods</b>	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
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**Arrowmate NPV****14. Transport information**

Air transport notes 1. 5L, 2. 60L

UN Number

UN No. (DOT) 1133 or Limited Quantity &lt;5L

UN No. (ICAO) 1133

UN proper shipping name

Proper shipping name (DOT) Adhesives

Transport hazard class(es)

DOT hazard class 3

## Transport labels

Packing group

II

**15. Regulatory information**Inventories

US - TSCA

Present.

Methyl Ethyl Ketone

Toluene

Acetone

**16. Other information**

Revision date 12/8/2015

Revision 1

Supersedes date 11/10/2015

SDS No. 21487

Hazard statements in full

H225 Highly flammable liquid and vapor.  
 H302 Harmful if swallowed.  
 H312 Harmful in contact with skin.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H336 May cause drowsiness or dizziness.  
 H361d Suspected of damaging the unborn child.  
 H373 May cause damage to organs through prolonged or repeated exposure.

ACA HMIS Health rating. Moderate hazard. (2)

## Arrowmate NPV

ACA HMIS Flammability rating.	Ignites easily. (3)
ACA HMIS Physical hazard rating.	Normally stable. (0)
ACA HMIS Personal protection rating.	B

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