



# Safety Data Sheet

Issue Date: 01-Jun-2010

Revision Date: 20-Nov-2013

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** ARROW 911 Low VOC PRIMER for PVC and CPVC Plastic Pipe

### Other means of identification

**SDS #** AAC-911

**Product Code** 911, 911-P, S-911, S-911-P

**UN/ID No** UN1993

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

**Recommended Use** Low VOC PRIMER for PVC and CPVC Plastic Pipe

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

#### **Manufacturer Address**

Arrow Adhesives Company  
5457 Spalding Dr.  
Norcross, GA 30092

### Emergency Telephone Number

**Company Phone Number** 1-800-678-9058

**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Liquid of various colors

**Physical State** Liquid

**Odor** Ether-like

### Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Flammable Liquids	Category 2

### Hazards Not Otherwise Classified (HNOC)

May be harmful in contact with skin

### Signal Word

**Danger**

### Hazard Statements

Harmful if swallowed

Harmful if inhaled

Causes serious eye irritation

May cause respiratory irritation. May cause drowsiness or dizziness

Highly flammable liquid and vapor

**Precautionary Statements - Prevention**

Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Wear eye/face protection  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a poison center or doctor/physician  
 IF ON SKIN (or hair): 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  
 IF SWALLOWED: Call a poison center or doctor/physician  
 Rinse mouth  
 IN CASE OF FIRE: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**WHMIS Classification**

Class B-Division 2 Class D-Division 2A Class D-Division 2B

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Tetrahydrofuran	109-99-9	Proprietary
Cyclohexanone	108-94-1	Proprietary
Methyl ethyl ketone	78-93-3	Proprietary
Acetone	67-64-1	Proprietary

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

## 4. FIRST-AID MEASURES

### First Aid Measures

<b>General Advice</b>	If exposed or concerned: Get medical advice/attention.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.
<b>Skin Contact</b>	Wash with soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
<b>Inhalation</b>	Remove to fresh air. If symptoms persist, call a physician. If breathing is difficult, administer oxygen; seek medical attention immediately.
<b>Ingestion</b>	Rinse mouth. If drowsy or unconscious, do not give anything by mouth; place individual on the left side with head down. Do not induce vomiting. Call a physician or Poison Control Center.

### Most important symptoms and effects

<b>Symptoms</b>	Direct eye contact may cause stinging, tearing and redness. May cause dermatitis or irritation in some individuals upon prolonged contact. May include redness, drying and cracking of skin. Prolonged breathing of vapors may cause nausea, headache, weakness and/or dizziness. Long term overexposure may cause liver and kidney damage.
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### Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician</b>	Individuals with chronic respiratory, skin, kidney, or liver disorders may be at increased risk from exposure.
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## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.

**Unsuitable Extinguishing Media** Not determined.

### Specific Hazards Arising from the Chemical

Class IB Flammable Liquid. Vapors may travel to source of ignition and flash back. Combustion products may be toxic.

**Hazardous Combustion Products** Carbon oxides. Hydrocarbons.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

<b>Personal Precautions</b>	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Persons not wearing proper personal protective equipment should be excluded from area of spill.
<b>Environmental Precautions</b>	Prevent runoff to sewers, streams, and other bodies of water.

### Methods and material for containment and cleaning up

<b>Methods for Containment</b>	Stop spill at source.
<b>Methods for Clean-Up</b>	Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Spills and releases may have to be reported to Federal and/or local authorities. See section 15.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

<b>Advice on Safe Handling</b>	Use personal protection recommended in Section 8. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing vapors or mists. Use only in well-ventilated areas. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Use spark-proof tools and explosion-proof equipment. Ground/bond container and receiving equipment. Take precautionary measures against static discharges. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, solid) all hazard precautions given in the data sheet must be observed. Avoid contact with skin, eyes or clothing.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Store away from sources of ignition. Store containers upright.
<b>Incompatible Materials</b>	Oxidizers. Acids. Bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cyclohexanone 108-94-1	STEL: 50 ppm TWA: 20 ppm S*	TWA: 50 ppm TWA: 200 mg/m <sup>3</sup> (vacated) TWA: 25 ppm (vacated) TWA: 100 mg/m <sup>3</sup> (vacated) S*	IDLH: 700 ppm TWA: 25 ppm TWA: 100 mg/m <sup>3</sup>
Tetrahydrofuran 109-99-9	STEL: 100 ppm TWA: 50 ppm S*	TWA: 200 ppm TWA: 590 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 735 mg/m <sup>3</sup>	IDLH: 2000 ppm TWA: 200 ppm TWA: 590 mg/m <sup>3</sup> STEL: 250 ppm STEL: 735 mg/m <sup>3</sup>
Acetone 67-64-1	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup> (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> (vacated) STEL: 2400 mg/m <sup>3</sup> The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m <sup>3</sup>
Methyl ethyl ketone 78-93-3	STEL: 300 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 590 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 590 mg/m <sup>3</sup> (vacated) STEL: 300 ppm (vacated) STEL: 885 mg/m <sup>3</sup>	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m <sup>3</sup> STEL: 300 ppm STEL: 885 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Ventilation systems. Eyewash stations. Showers. Mechanical exhaust (explosion proof) may be required.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Splash goggles or safety glasses.

**Skin and Body Protection** Rubber gloves. Wear protective clothing appropriate for task (coveralls, apron, Tyvek suit).

**Respiratory Protection** Not required with normal usage. Wear approved respirator in confined spaces or limited ventilation.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Ether-like
<b>Appearance</b>	Thin liquid	<b>Odor Threshold</b>	0.88 ppm
<b>Color</b>	Clear or purple		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH</b>	Not available		
<b>Melting Point/Freezing Point</b>	-108 °C / -163 °F		
<b>Boiling Point/Boiling Range</b>	56 °C / 133 °F		
<b>Flash Point</b>	-20 °C / -4 °F		
<b>Evaporation Rate</b>	8.0	(butyl acetate = 1)	
<b>Flammability (Solid, Gas)</b>	n/a-liquid		
<b>Upper Flammability Limits</b>	12.8%		
<b>Lower Flammability Limit</b>	1.8%		
<b>Vapor Pressure</b>	190 mm Hg	@ 20°C (68°F)	
<b>Vapor Density</b>	2.5	(Air=1)	
<b>Specific Gravity</b>	0.82		
<b>Water Solubility</b>	Negligible		
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Auto-ignition Temperature</b>	321 °C / 610 °F		
<b>Decomposition Temperature</b>	Not determined		
<b>Kinematic Viscosity</b>	Not determined		
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	Not determined		
<b>Oxidizing Properties</b>	Not determined		
<b>VOC Content</b>	Maximum VOC emissions when applied and tested per SCAQMD Rule 1168, Test Method 316A is 550 g/L		

**10. STABILITY AND REACTIVITY****Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization** Hazardous polymerization does not occur.**Conditions to Avoid**

Avoid heat, sparks, open flames and other ignition sources.

**Incompatible Materials**

Oxidizers. Acids. Bases.

**Hazardous Decomposition Products**

Carbon oxides. Hydrogen chloride. Hydrocarbons.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

**Eye Contact** Causes serious eye irritation.

**Skin Contact** May be harmful in contact with skin.

**Inhalation** Harmful if inhaled.

**Ingestion** Harmful if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Cyclohexanone 108-94-1	= 800 mg/kg ( Rat )	= 948 mg/kg ( Rabbit )	= 10.7 mg/L ( Rat ) 4 h = 8000 ppm ( Rat ) 4 h
Tetrahydrofuran 109-99-9	= 1650 mg/kg ( Rat )	-	= 53.9 mg/L ( Rat ) 4 h = 180 mg/L ( Rat ) 1 h
Acetone 67-64-1	= 5800 mg/kg ( Rat )	-	-
Methyl ethyl ketone 78-93-3	= 2737 mg/kg ( Rat )	= 6480 mg/kg ( Rabbit )	-

**Information on physical, chemical and toxicological effects****Symptoms** Please see section 4 of this SDS for symptoms.**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Tetrahydrofuran 109-99-9	A3			
Cyclohexanone 108-94-1	A3	Group 3		

**Legend****ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 3 IARC components are "not classifiable as human carcinogens"

**STOT - single exposure** May cause respiratory irritation. May cause drowsiness or dizziness.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Category IV

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Cyclohexanone 108-94-1	20: 96 h Chlorella vulgaris mg/L EC50	481 - 578: 96 h Pimephales promelas mg/L LC50 flow-through 8.9: 96 h Pimephales promelas mg/L LC50	EC50 = 18.5 mg/L 5 min EC50 = 21.3 mg/L 10 min EC50 = 25 mg/L 5 min	800: 24 h Daphnia magna mg/L EC50
Tetrahydrofuran 109-99-9		1970 - 2360: 96 h Pimephales promelas mg/L LC50 flow-through 2700 - 3600: 96 h Pimephales promelas mg/L LC50 static		5930: 24 h Daphnia magna mg/L EC50
Acetone 67-64-1		4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	EC50 = 14500 mg/L 15 min	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
Methyl ethyl ketone 78-93-3		3130 - 3320: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min	520: 48 h Daphnia magna mg/L EC50 5091: 48 h Daphnia magna mg/L EC50 4025 - 6440: 48 h Daphnia magna mg/L EC50 Static

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Tetrahydrofuran 109-99-9	0.45
Cyclohexanone 108-94-1	0.86
Methyl ethyl ketone 78-93-3	0.29
Acetone 67-64-1	-0.24

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**US EPA Waste Number**

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Cyclohexanone 108-94-1		Included in waste stream: F039		U057
Tetrahydrofuran 109-99-9				U213
Acetone 67-64-1		Included in waste stream: F039		U002
Methyl ethyl ketone 78-93-3	U159	Included in waste streams: F005, F039	200.0 mg/L regulatory level	U159

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Tetrahydrofuran 109-99-9	Toxic Ignitable
Methyl ethyl ketone 78-93-3	Toxic Ignitable
Acetone 67-64-1	Ignitable

**14. TRANSPORT INFORMATION****Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

**UN/ID No** UN1993  
**Proper Shipping Name** Flammable liquid, n.o.s. (Methyl ethyl ketone, Acetone)  
**Hazard Class** 3  
**Packing Group** II

**Note:**

Ground shipments of containers up to 1L per inner packaging, qualify for 'Limited Quantity' exception.

**IATA**

**UN/ID No** UN1993  
**Proper Shipping Name** Flammable liquid, n.o.s. (Methyl ethyl ketone, Acetone)  
**Hazard Class** 3  
**Packing Group** II

**IMDG**

**UN/ID No** UN1993  
**Proper Shipping Name** Flammable liquid, n.o.s. (Methyl ethyl ketone, Acetone)  
**Hazard Class** 3  
**Packing Group** II  
**Marine Pollutant** No



## 15. REGULATORY INFORMATION

### International Inventories

#### TSCA

Listed

#### Legend:

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

### US Federal Regulations

#### CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Tetrahydrofuran 109-99-9	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Cyclohexanone 108-94-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Methyl ethyl ketone 78-93-3	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Acetone 67-64-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

#### SARA 313

Not determined

### US State Regulations

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Tetrahydrofuran 109-99-9	X	X	X
Cyclohexanone 108-94-1	X	X	X
Methyl ethyl ketone 78-93-3	X	X	X
Acetone 67-64-1	X	X	X

<b>16. OTHER INFORMATION</b>
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<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	2	3	1	None
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	2	3	1	G

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**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.

**End of Safety Data Sheet**