

Section 1: Identification

Product Identifiers

Product name Aron Mighty FS-175SV10 Product number AM00101, AM00103, AM00115, AM001P2, AM001Q2

Recommended use of & restrictions on use Industrial Adhesive

Emergency telephone number

CHEMTREC (800) 424-9300 Manufacturer's Information

Manufacturer's Name

Toagosei America Inc. 1450 West Main Street West Jefferson, OH 43162

Telephone: (614) 879-9411

Section 2 – Hazard Identification

Classification of the substance or mixture

Classification according to 1910.1200:

Flammable Liquids	Category 2
Acute Toxicity (oral)	Category 4
Serious Eye Irritation	Category 2
Carcinogenicity	Category 2
Specific Target Organ Toxicity- Single Exposure (STOT-SE)	Category 2

Label Elements







Pictograms

Flame Exclamation point Health Hazard

Signal word Danger

Hazard statements

Highly flammable liquid and vapor.

Harmful if swallowed.

Causes serious eye irritation.

Suspected of causing cancer.

May cause damage to organs (central nervous system, optic nerve) (oral).



Precautionary statements

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.

Keep container tightly closed.

Ground/Bond container and receiving equipment.

Use explosion-proof electrical, ventilating, and lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe vapors, mist, or spray.

Wash hands, forearms, and other exposed areas thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves, protective clothing, and eye protection.

Response

If swallowed: Call a poison center or doctor if you feel unwell.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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: Call a poison center or doctor.

Rinse mouth.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use appropriate media (see section 5) to extinguish.

Storage

Store locked up in a cool, well-ventilated place.

Disposal

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

Hazards Not Otherwise Classified

No data available.



Section 3 – Composition/Information on Ingredients

Chemical Name	Common Name/Synonyms	CAS Number	Concentration %
Ethyl Alcohol	Ethanol	64-17-5	<70
Isopropanol	Isopropyl Alcohol	67-63-0	<8
Methanol	Methyl Alcohol	67-56-1	<8
2-Pentanone, 4-methyl-	Methyl Isobutyl Ketone	108-10-1	<1

^{*}Nonhazardous ingredients are not listed and make up the balance of the product.

Section 4 – First-Aid Measures

4.1 Description of first aid measures

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention. Contains methanol, administration of pure ethanol or fomepizole may be required to treat methanol poisoning.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin: Immediately remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention.

Eyes: Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Harmful if swallowed. May cause damage to organs (central nervous system, optic nerve) (oral). Causes serious eye irritation. Suspected of causing cancer.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: This material contains methanol, which, when ingested, may cause acidosis and ocular toxicity ranging from diminished visual capacity to complete blindness, and possible death.

Chronic Symptoms: Suspected of causing cancer.



4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand. Contains methanol, administration of pure ethanol or fomepizole may be required to treat methanol poisoning.

Section 5 – Fire-Fighting Measures

5.1 Extinguishing media

Suitable – Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂). Water may be ineffective but water should be used to keep fire-exposed container cool.

Unsuitable – Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2 Special hazards arising from the mixture

Fire Hazard: Highly flammable liquid and vapor.

Explosion Hazard: May form flammable or explosive vapor-air mixture.

Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion.

5.3 Special protective equipment and precautions for fire-fighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Ammonia. Carbon oxides (CO, CO₂). Hydrogen cyanide. Nitrogen oxides.

Section 6 - Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges. Do not breathe vapor, mist or spray.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Eliminate ignition sources first, then ventilate the area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: As an immediate precautionary measure, isolate spill or leak area in all directions. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Use only non-sparking tools. Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

Section 7 – Handling and Storage

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take precautionary measures against static discharge. Use only non-sparking tools. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Handle empty containers with care because they may still present a hazard. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.





7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions: Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)—Industrial Adhesive

Section 8 – Exposure Controls/Personal Protection

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Ethyl alcohol (64-17-5)		
LICA ACCILI	ACCILLOFT STEL	1000 ppm
USA ACGIH	ACGIH OEL STEL ACGIH chemical category	1000 ppm Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA NIOSH	NIOSH REL TWA	1900 mg/m³
USA NIOSH	NIOSH REL TWA	1000 ppm
USA IDLH	IDLH	3300 ppm (10% LEL)
USA OSHA	OSHA PEL TWA	1900 mg/m³
USA OSHA	OSHA PEL TWA	1000 ppm

Isopropyl alcohol (67-63-0)		
USA ACGIH	ACGIH OEL TWA	200 ppm
USA ACGIH	ACGIH OEL STEL	400 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA ACGIH	BEI BLV	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: end of
		shift at end of workweek (background, nonspecific)
USA NIOSH	NIOSH REL TWA	980 mg/m ³
USA NIOSH	NIOSH REL TWA	400 ppm
USA NIOSH	NIOSH REL STEL	1225 mg/m³
USA NIOSH	NIOSH REL STEL	500 ppm
USA IDLH	IDLH	2000 ppm (10% LEL)
USA OSHA	OSHA PEL TWA	980 mg/m ³
USA OSHA	OSHA PEL TWA	400 ppm



Methanol (67-56-1)		
USA ACGIH	ACGIH OEL TWA	200 ppm
USA ACGIH	ACGIH OEL STEL	250 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA ACGIH	BEI BLV	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific)
USA NIOSH	NIOSH REL TWA	260 mg/m³
USA NIOSH	NIOSH REL TWA	200 ppm
USA NIOSH	NIOSH REL STEL	325 mg/m ³
USA NIOSH	NIOSH REL STEL	250 ppm
USA IDLH	IDLH	6000 ppm
USA OSHA	OSHA PEL TWA	260 mg/m³
USA OSHA	OSHA PEL TWA	200 ppm

Methyl Isobutyl Ketone(108-10-1)		
USA ACGIH	ACGIH OEL TWA	20 ppm
USA ACGIH	ACGIH OEL STEL	75 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA ACGIH	BEI BLV	1 mg/l Parameter: MIBK - Medium: urine - Sampling time: end of shift
USA NIOSH	NIOSH REL TWA	205 mg/m ³
USA NIOSH	NIOSH REL TWA	50 ppm
USA NIOSH	NIOSH REL (STEL	300 mg/m ³
USA NIOSH	NIOSH REL STEL	75 ppm
USA IDLH	IDLH	500 ppm
USA OSHA	OSHA PEL TWA	410 mg/m³
USA OSHA	OSHA PEL TWA	100 ppm

8.2. **Exposure Controls**

Appropriate Engineering Controls	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.
Personal Protective Equipment	Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.
Materials for Protective Clothing	Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.
Hand Protection	Wear protective gloves.
Eye and Face Protection	Chemical safety goggles.
Skin and Body Protection	Wear suitable protective clothing.

Printed: 11/1/2023 FS-175SV10 Version 1.3 Revised 10/17/23 7



Respiratory Protection	If exposure limits are exceeded or irritation is experienced, approved
	respiratory protection should be worn. In case of inadequate ventilation,
	oxygen deficient atmosphere, or where exposure levels are not known wear
	approved respiratory protection.
Other Information	When using, do not eat, drink or smoke.

Section 9 – Physical and Chemical Properties

a) Appearance: Clear to slightly yellow liquid

b) Odor: Mild

c) Odor threshold: No data available

d) pH: No data available

e) Melting point/freezing point:

No data available

f) Initial boiling point and boiling

range: 78°C/172°F

g) Flash point: 14°C/57.2°F

h) Evaporation rate – No data available

i) Flammability: No data available

j) Upper/lower flammability or

explosive limits:

Lower explosion limit: 4.3

Upper explosion limit: 19

k) Vapor pressure: 44 (mmHg @ 20°C), 5865 (Pa @ 20°C)

I) Vapor density: 2.5 (AIR=1)

m) Relative density: 0.8

(Water = $1 @ 25^{\circ}C$)

n) Solubility in water: Partially soluble

o) Partition coefficient: No data

available

p) Auto-ignition temperature: No

data available

q) Decomposition temperature: No

data available

r) Viscosity: No data available

s) VOC content: 597 g/L

(SCAQMD Method 316B)

Section 10 - Stability and Reactivity

Reactivity – Reacts violently with strong oxidizers. Increased risk of fire or explosion.

Chemical stability – Highly flammable liquid and vapor. May form flammable or explosive vapor-air mixture.

Possibility of hazardous reactions – Hazardous polymerization will not occur.

Conditions to avoid – Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

Incompatible materials – Strong acids, strong bases, strong oxidizers.

Hazardous decomposition products – Thermal decomposition may produce: ammonia, carbon oxides (CO, CO₂), hydrogen cyanide, nitrogen oxides.



Section 11 – Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity (Oral): Harmful if swallowed Acute Toxicity (Dermal): Not classified Acute Toxicity (Inhalation): Not classified

Aron Mighty FS-175SV10	
ATE (Oral)	1260 mg/kg body weight

Ethyl alcohol (64-17-5)	
LD50 Oral Rat	10470 mg/kg
LD50 Dermal Rat	20 ml/kg
LC50 Inhalation Rat	124.7 mg/l/4h

Isopropyl alcohol (67-63-0)	
LD50 Dermal Rabbit	12956 mg/kg (16.4 mL/kg bw)
LC50 Inhalation Rat	> 10000 ppm (Exposure time: 6 h)

Methanol (67-56-1)	
LD50 Dermal Rabbit	15840 mg/kg
LC50 Inhalation Rat	22500 ppm (Exposure time: 8 h)
ATE (Oral)	100 mg/kg body weight
ATE (Dermal)	300 mg/kg body weight
ATE (Inhalation)	3.00 mg/l/4h

Methyl Isobutyl Ketone(108-10-1)	
LD50 Oral Rat	2080 mg/kg
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat	11.6 mg/l/4h
LC50 Inhalation Rat	2000 – 4000 ppm/4h

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Suspected of causing cancer

Methyl Isobutyl Ketone(108-10-1)	
IARC group	2B
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity.

Acetaldehyde (75-07-0)	
IARC group	1, 2B



National Toxicology Program (NTP)	Reasonably anticipated to be Human Carcinogen.
Status	

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause damage to organs (central nervous system, optic nerve) (oral)

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: This material contains methanol, which, when ingested, may cause acidosis and ocular toxicity ranging from diminished visual capacity to complete blindness, and possible death.

Chronic Symptoms: Suspected of causing cancer.

Section 12 – Ecological Information

12.1 Toxicity

Ecotoxicity – Not classified.

Ethyl alcohol (64-17-5)	
LC50 Fish	11200 mg/l
EC50 Crustacea	9268 – 14221 mg/l (Exposure time: 48 h - Species: Daphnia
	magna)
LC50 Fish	> 100 mg/l (Exposure time: 96 h - Species: Pimephales
	promelas [static])
ErC50 Algae	1000 mg/l
NOEC Chronic	9.6 mg/l
Crustacea	

Isopropyl alcohol (67-63-0	
LC50 Fish	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas
	[flow-through])
EC50 Crustacea	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic	1000 mg/l (Exposure time: 96 h - Species: Desmodesmus
Organisms	subspicatus)
LC50 Fish	11130 mg/l (Exposure time: 96 h - Species: Pimephales
	promelas [static])

EC50 Other Aquatic	1000 mg/l (Exposure time: 72 h - Species: Desmodesmus
Organisms	subspicatus)

Methanol (67-56-1)	
LC50 Fish	28200 mg/l (Exposure time: 96 h - Species: Pimephales
	promelas [flow-through])
EC50 Crustacea	1340 mg/l
LC50 Fish	> 100 mg/l (Exposure time: 96 h - Species: Pimephales
	promelas [static])

Methyl Isobutyl Ketone(108-10-1)	
LC50 Fish	496 – 514 mg/l (Exposure time: 96 h - Species: Pimephales
	promelas [flow-through])
EC50 Crustacea	170 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 Algae	400 mg/l (Exposure time 96 h - Species: Pseudokirchneriella
	subcapitata)
NOEC Chronic Fish	57 mg/l
NOEC Chronic	7.8 mg/l
Crustacea	

12.2 Persistence and degradability – Not established.

12.3 Bioaccumulative potential – Not established.

Ethyl alcohol (64-17-5)	
Partition coefficient n-octanol/water	-0.35 (at 24 °C (at pH 7.4)
(Log Pow)	

Isopropyl alcohol (67-63-0)	
Partition coefficient n-octanol/water	0.05 (at 25 °C)
(Log Pow)	

Methanol (67-56-1)	
BCF Fish	10 (dimensionless)
Partition coefficient n-octanol/water	-0.77
(Log Pow)	

Methyl Isobutyl Ketone(108-10-1)	
Partition coefficient n-octanol/water	1.9 (at pH 6.7)
(Log Pow)	

12.4 Mobility in soil – No data available.

12.5 Other adverse effects – Avoid release to the environment

Revised 10/17/23 FS-175SV10 Version 1.3 Printed: 11/1/2023 11



Section 13 - Disposal Considerations

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology - Waste Materials: Avoid release to the environment.

Section 14 – Transport Information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name	ADHESIVES
Hazard Class	3
Identification Number	UN1133
Label Codes	3
Packing Group	II
ERG Number	128

14.2. In Accordance with IMDG

Proper Shipping Name	ADHESIVES
Hazard Class	3
Identification Number	UN1133
Packing Group	II
Label Codes	3
EmS-No. (Fire)	F-E
EmS-No. (Spillage)	S-D

14.3. In Accordance with IATA

Proper Shipping Name	ADHESIVES
Packing Group	II
Identification Number	UN1133
Hazard Class	3
Label Codes	3
ERG Code (IATA)	3L



Section 15 - Regulatory Information

15.1. US Federal Regulations

Aron Mighty FS-175SV10	Aron Mighty FS-175SV10				
SARA Section 311/312 Hazard Classes	Health hazard - Acute toxicity (any route of exposure)				
	Health hazard - Carcinogenicity				
	Health hazard - Serious eye damage or eye irritation				
	Health hazard - Specific target organ toxicity (single or repeated				
	exposure)				
	Physical hazard - Flammable (gases, aerosols, liquids, or solids)				
Ethyl alcohol (64-17-5)					
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active					
Isopropyl alcohol (67-63-0)					
Listed on the United States TSCA (Toxic S	ubstances Control Act) inventory - Status: Active				
Subject to reporting requirements of Uni	ted States SARA Section 313				
SARA Section 313 - Emission Reporting	1 % (only if manufactured by the strong acid process, no supplier				
	notification)				
Methanol (67-56-1)					
Listed on the United States TSCA (Toxic S	ubstances Control Act) inventory - Status: Active				
Subject to reporting requirements of United States SARA Section 313					
CERCLA RQ	5000 lb				
SARA Section 313 - Emission Reporting	1%				
Methyl Isobutyl Ketone(108-10-1)					
Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active					
Subject to reporting requirements of United States SARA Section 313					
CERCLA RQ	5000 lb				
SARA Section 313 - Emission Reporting	0.1 %				

15.2. US State Regulations

Ethyl alcohol (64-17-5)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List

Isopropyl alcohol (67-63-0)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List

Methanol (67-56-1)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List

Methyl Isobutyl Ketone(108-10-1)

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List
- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List



California Proposition 65

WARNING: This product can expose you to chemicals including methyl isobutyl ketone and acetaldehyde, which is known to the Sate of California to cause cancer, and methanol and methyl isobutyl ketone, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Methanol (67-56-1)		Х		
Methyl Isobutyl Ketone(108-10-1)	Х	Х		
Acetaldehyde (75-07-0)	Х			

Section 16 – Other Information

Version 1.3 Revised 10/17/23 Printed: 11/1/2023

To the best of our knowledge, the information contained herein is accurate. However, neither Toagosei America Ltd. nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.