

1. Identification

Product Identification

Product Identifier: AT (AT10, AT13, AT30, AT)

Recommended Use: Two Component High Strength Anchoring Adhesive

Use Restrictions: None known.

Company Identification

Company: Simpson Strong-Tie Company Inc.

Address: 5956 W. Las Positas Blvd.

Pleasanton, CA 94588

Phone: 1-800-999-5099 **Website:** www.strongtie.com

Emergency: 1-800-535-5053 (US/Canada)

1-352-323-3500 (International)

For most current SDS, please visit our website at www.strongtie.com/sds

2. Hazard Identification

General Information

AT Anchoring Adhesive is a two part system. The two parts of this product have been assessed according to GHS and are classified below. The final hardened material is considered nonhazardous. Some hazards apply upon grinding or cutting through hardened product.

Resin (white side) GHS Classification



Physical Hazards:Flammable LiquidsCategory 2Health Hazards:Skin Corrosion/IrritationCategory 2Serious Eye Damage/IrritationCategory 2A

Sensitization, Skin

Category 1

Environmental Hazards: Acute Aquatic Environmental Hazard Category 3

Signal Word: DANGER!

Hazard Statements: Highly flammable liquid and vapor. Causes skin irritation. May cause an allergic skin

reaction. Causes serious eye irritation. Harmful to aquatic life.

Precautionary Statements

Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container

tightly closed. Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment. Use only non-sparking tools. Take

precautionary measures against static discharge. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear

protective gloves/protective clothing/eye protection/face protection. Use only outdoors or

in a well-ventilated area. Wash thoroughly after handling. Contaminated work clothing

must not be allowed out of the workplace. Avoid release to the environment

Response: Response in case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder or water

fog for extinction. 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. If eye irritation persists: Get medical advice/attention. If on skin: Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing

before reuse.

Storage: Store away from other materials. Store in a well-ventilated place. Keep container tightly

closed. Store between 32-80°F (0-27°C). Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international

regulations.



Initiator (black side) GHS Classification



 Physical Hazards:
 Organic Peroxides
 Type E

 Health Hazards:
 Serious Eye Damage/Irritation
 Category 1

 Constitution
 Category 1

Sensitization, Skin Category 1
Reproductive Toxicity Category 1B
Acute Aquatic Environmental Hazard Category 1

Signal Word: DANGER!

Hazard Statements: Heating may cause a fire. Causes serious eye irritation. May cause an allergic skin

Chronic Aquatic Environmental Hazard

reaction. May damage fertility or the unborn child. Very toxic to aquatic life with long

Category 1

lasting effects.

Precautionary Statements:

Environmental Hazards:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep away from clothing and other combustible materials. Wear protective

gloves/protective clothing/eye protection/face protection. Do not breathe

dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Keep only in original container.

Avoid release to the environment.

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. If eye irritation persists: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash

contaminated clothing before reuse. Collect spillage.

Storage: Store away from other materials. Store between 32-80°F (0-27°C). Store locked up. **Disposal:** Dispose of contents/container in accordance with local/regional/national regulations.

Hazards Not Otherwise Classified (HNOC)

The above hazards are for the uncured components of AT. Upon combination the two parts form an innocuous solid which does not present any immediate hazards. Upon grinding or cutting through the cured product, the following hazards may apply.



Health Hazards: Carcinogenicity Category 1A

STOT, Repeated Exposure Category 2A (Lung)

Hazard Statements: May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements: Do not breathe dust.

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for each component are listed below. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

Resin (white side)

Chemical Name	CAS Number	Weight %
Crystalline Silica, Quartz	14808-60-7	40-50
Methyl Methacrylate Monomer	80-62-6	20-30
2-Propenoic acid, 2-methyl-1,6-hexanediyl ester	6606-59-3	1-5
Tripropylene Glycol Diacrylate	42978-66-5	< 2.5



Initiator (black side)

Chemical Name	CAS Number	Weight %
Crystalline Silica, Quartz	14808-60-7	30-50
Diisobutyl Phthalate	84-69-5	20-30
Dibenzoyl Peroxide	94-36-0	20-25
Zinc Oxide	1314-13-2	< 1

First-Aid Measures

General Information

Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Routes of Exposure

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding

the eyes open. Remove contact lenses if present and easy to do. If redness, burning,

blurred vision, or swelling persists, consult a physician.

Skin Contact: Remove contaminated clothing and product, immediately wash affected area with soap

and water. Do not apply greases or ointments. If redness, burning, or swelling persists,

consult a physician.

Rinse mouth immediately. Do not induce vomiting. Consult a physician. **Ingestion:**

Inhalation: Remove patient to fresh air. Give oxygen or artificial respiration if needed. Do not use

mouth-to-mouth method if victim inhaled the substance. If patient continues to

experience difficulty breathing, consult a physician.

Most Important Symptoms

Skin and eye irritation. Rash. Prolonged exposure may cause chromic effects.

Fire-Fighting Measures

Suitable Extinguishing Media: Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide.

Additional Information:

Do not use water jet as an extinguisher as this will spread the fire.

Hazards during Fire-Fighting:

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to

a source of ignition and flash back. May re-ignite after fire is extinguished. During fire,

gases/vapors hazardous to health may be formed.

Fire-Fighting Procedures: Use standard fire-fighting procedures and consider the hazards of other involved

> materials. In case of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams,

sewers, or drinking water supply

Accidental Release Measures

Personal Precautions

Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Clean-Up Methods

Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Place in leak-proof containers. Seal

tightly for proper disposal. Clean surface thoroughly to remove residual contamination.

Approach leak area with caution. Eliminate ignition sources. Take precautionary Large spills:

measures against static discharge. Stop the flow of material, if this is without risk. Dike far ahead of spill to contain material. Use a non-combustible material like vermiculite, sand or earth to soak up the product. Place in leak-proof containers. Seal tightly for proper disposal. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. Keep combustibles away from spilled

material.



Environmental Precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Handling

Keep away from open flames, hot surfaces and sources of ignition. All equipment use when handling this product must be grounded. Explosion proof exhaust ventilation is suggested. Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. When using do not eat, drink, or smoke. Wash thoroughly after handling. Observe good industrial hygiene practices.

Storage

Store in a closed container away from incompatible materials. Keep in original container. Keep container tightly closed. Store in a dry place out of direct sunlight. Store between 32-80°F (0-27°C). Store in a well-ventilated place. Store locked up. Keep away from heat/sparks/open flame/hot surfaces. No smoking. Protect container from physical damage.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

General Protection: Wear appropriate personal protective equipment.

Eye Protection: Wear chemical splash goggles or safety glasses with side shield. **Hand Protection:** Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.

Skin and Body Protection: Wear long sleeve shirts/long pants and other clothing as required to minimize contact. **Respirator Protection:** The use of a respirator is not required during regular use of this product. An NIOSH or

MSHA approved air-purifying respirator should be worn whenever workplace conditions

warrant respirator use or when grinding or cutting cured product.

General Hygiene: Always observe good personal hygiene measures, such as washing after handling the

material and before eating, drinking, and/or smoking. Routinely wash work clothing and

protective equipment to remove contaminants.

Engineering Controls

Explosion-proof general and local exhaust ventilation. When using indoors good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Ready access to running water is required. Provide eyewash station.

Exposure Limits

Component	OSHA (PEL)	ACGIH (TLV)	NIOSH Pocket Guide
Methyl Methacrylate Monomer (CAS 80-62-6)	410 mg/m ³ 100 ppm	100 ppm (STEL) 50 ppm (TWA)	100 ppm (TWA)
Quartz* (CAS 14808-60-7)	0.3 mg/m ³ (total dust) 0.1 mg/m ³ (respirable)	0.025 mg/m³ (respirable)	0.05 mg/m³ (respirable)
Zinc Oxide (CAS 1314-13-2)	5 mg/m³(Respirable) 5 mg/m³(Fume) 15 mg/m³ (Total dust)	10 mg/m ³ (STEL, respirable) 2 mg/m ³ (TWA, respirable)	15 mg/m ³ (Ceiling, dust) 5 mg/m ³ (TWA, dust) 10 mg.m ³ (STEL, fume)
Dibenzoyl Peroxide (CAS 94-36-0)	5 mg/m ³	5 mg/m ³ (TWA)	5 mg/m³ (TWA)

^{*}after cure hazard, avoid breathing dust.

Additional Information

After Cure: Product forms an innocuous solid. Processing after cure (grinding or cutting) may

produce dust containing compounds that present an inhalation hazard.

9. Physical and Chemical Properties

PropertyResinInitiatorPhysical State:Liquid, PasteLiquid, PasteColor:WhiteBlack



Odor: Strong acrid odor No Significant Odor

pH: 5.9
 Flammability limit – lower %: No data
 Flammability limit – upper %: No data
 Vapor Pressure: Not volatile
 Vapor Density: No data

Solubility: No data Slightly soluble in water **Freezing/Melting Point:** No data approximately 10 °F (-12°C)

Boiling Point: No data No data

Flash Point: >73 °F (>22.8 °C) Closed Cup 203 °F (95.0 °C) Closed Cup

Evaporation Rate: No data No data

Decomposition Temperature: No data 113 °F (45 °C) (SADT) **Specific Gravity:** No data 1.38 at (72°F/22°C)

VOC (after cure):

Kow:

No data

No data

Viscosity:

No data

No data

No data

No data

Non-corrosive

Non-corrosive

10. Stability and Reactivity

Resin (white side)

Reactivity: Stable under normal conditions. Unstable with heat.

Chemical Stability: Stable under normal conditions.

Condition to Avoid: Heat and open flame.

Substances to Avoid: Oxidizing and reducing agents.

Hazardous Reactions: No dangerous reactions known under normal use. Polymerization can occur when

exposed to excessive heat.

Decomposition Products: Decomposes with heat. Combustion may produce carbon monoxide, carbon dioxide,

aldehydes and smoke.

Initiator (black side)

Reactivity: Stable and non-reactive under normal storage conditions.

Chemical Stability: Stable under normal temperature conditions. **Condition to Avoid:** Avoid temperatures above 113 °F (45 °C).

Substances to Avoid: Rust. Iron. Copper. Acids. Alkalis. Reducing agents.

Hazardous Reactions: The product is stable if stored and handled as prescribed/indicated

Decomposition Products: Benzoic acid. Benzene. Biphenyl. Phenyl Benzoate.

11. Toxicological Information

Likely Routes of Exposure

Ingestion: Ingestion may cause irritation to the gastrointestinal tract.

Inhalation: This material is a viscous liquid to semi-solid that does not easily form vapors. Inhalation

of dust from cutting or grinding cured product may irritate the respiratory tract.

Skin contact: May cause an allergic skin reaction. Dermatitis.

Eye contact: Causes serious eye irritation.

Information on Toxicological Effects

Acute toxicity: Occupational exposure to the substance or mixture may cause adverse effects.

Product	Species	Test Result
AT Resin (mixture)	•	
Acute, Oral, LD50	Rat	>5000 mg/kg
Dibenzoyl Peroxide (94-36-0)		-
Acute, Inhalation, LC50	Rat	24.3 mg/l 4 hours
Diisobutly Phthalate (84-69-5)		
Acute, Oral, LD50	Rat	10392 mg/kg

Skin corrosion/irritation: Causes skin irritation. **Eye damage/eye irritation:** Causes serious eye irritation.

Respiratory sensitization: No data available.



Skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: The available data does not indicate that any ingredient of this product present at greater

than 0.1% are mutagenic or genotoxic.

Carcinogenicity: May cause cancer. Both components of this product contain Quartz. Quartz is considered

a carcinogen only in its inhalable form. Due to the nature of this product inhalation is highly unlikely. Exposure to respirable Quartz is likely only when grinding or cutting cured product, ensure good work practice and use of personal protective equipment as

needed to control exposure.

IARC Monographs. Overall Evaluation of CarcinogenicityQuartz (14808-60-7)
1 Carcinogenic to humans

Dibenzoyl Peroxide (94-36-0) 3 Not classifiable as a carcinogen to humans Methyl Methacrylate Monomer 3 Not classifiable as to carcinogenicity in humans

NTP Report on Carcinogens

Quartz (14808-60-7) Known to be human carcinogen An ingredient of the initiator may damage fertility or the unborn child. Due to the physical form of this product it is not an aspiration hazard.

Aspiration hazard: Specific target organ toxicity:

Reproductive toxicity:

Single exposure May cause respiratory irritation.

Repeated exposure Prolonged inhalation of processing dust may be harmful. May cause damage to organs

(lung) through prolonged or repeated exposure.

Further Information

Toxicological, ecotoxicological, physical, and chemical properties may not have been fully investigated. Hazard data above is estimated based on best available information. Some workers with certain pre-existing medical conditions such as: asthma, allergies, or impaired pulmonary and/or liver functions, or who may be particularly susceptible to this material, may be affected by exposure to this material.

12. Ecological Information

General Information

Information given is based on data on the components and the ecotoxicology of similar products. Resin is classified as harmful to aquatic life. Initiator is classified as very toxic to aquatic life with long lasting effects. Avoid release to the environment.

Supporting Data

Component	Species	Test Result
Methyl Methacrylate Monomer (80-62-6)		
Acute, Crustacea EC50	Daphnia magna	69 mg/l, 48 hours
Tripropylene Glycol Diacrylate (42978-66-5)		
Acute, Crustacea EC50	Daphnia magna	89 mg/l, 48 hours
Acute, Fish LC50	Leuciscus idus	4.6-10 mg/l, 48 hours
Dibenzoyl Peroxide (94-36-0)		
Aquatic Acute, Algae, LC50	Pseudokirchnerella subcapitata	0.0711 mg/l, 72 hours
Aquatic, Acute, Crustacea EC50	Daphnia magna	0.11 mg/l 48 hours
Aquatic Acute, Fish, EC50	Oncorhynchus mykiss	0.0602 mg/l, 96 hours
Zinc Oxide (1314-13-2)	·	
Acute, Crustacea LC50	Daphnia magna	0.098 mg/l 48 hours

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: No data available for this product.

Partition coefficient n-octanol / water (log Kow)Methyl Methacrylate Monomer (80-62-6)1.38Dibenzoyl Peroxide (CAS 94-36-0)3.46Diisobutyl Phthalate (CAS 84-69-5)4.11

Mobility in soil: No data available.

Further Information

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.



13. Disposal Consideration

Waste Disposal of Substance: This material must be disposed of as hazardous waste. Do not allow this material to drain

into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Container Disposal: Empty containers or liners may retain some product residues; follow label warnings even

after container is emptied. Empty containers should be taken to an approved waste

handling site for recycling or disposal.

Disposal of Cured Substance: Grind or chip off surface. Solid material does not need special disposal consideration.

14. Transportation Information

Resin (white side)

UN number: UN1866

UN proper shipping name: RESIN SOLUTION, 3, III

Precautions: Flammable

Required Labels: 3
ERG Code (IATA): 3L
EmS (IMDG): F-E, S-E

Hardener (black side)

UN number: UN3107

UN proper shipping name: ORGANIC PEROXIDE TYPE E, LIQUID (Dibenzoyl Peroxide, 22%),

5.2, II, Marine Pollutant

Precautions: Organic Peroxide, Marine Pollutant

Required Labels: 5.2 ERG Code (IATA): 5L EmS (IMDG): F-J, S-R

Additional Information

Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

This substance/mixture is not intended to be transported in bulk.

Based on the **packaging size**, the supplier may apply the basic description: **UN3269**, **Polyester Resin Kit**, **3**, **III**. Please consult the 49 CFR HMR, IATA DGR, and IMDG Code to ensure that subsequent shipments comply with these regulations.

This information does not cover all specific regulatory or operational requirements of this product. The classifications for transportation may vary by container volume or different regional or national regulations.

15. Regulatory Information

United States

Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4):

Methyl Methacrylate Monomer (80-62-6) LISTED (RQ: 1000)

Diisobutyl Phthalate (84-69-5)

Zinc Oxide (1314-13-2)

LISTED

LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories:	Immediate	Delayed	Fire	Pressure	Reactivity
Resin	Yes	Yes	Yes	No	No
Initiator	Yes	Yes	Yes	No	Yes





SARA 302 Extremely hazardous substance: No SARA 311/312 Hazardous chemical: Yes

SARA 313 (TRI reporting)

Chemical Name	CAS Number	% by weight
Methyl Methacrylate Monomer	80-62-6	20-30
Dibenzoyl Peroxide	94-36-0	20-25

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Methyl Methacrylate Monomer (80-62-6)

US State Right-To-Know (RTK) Lists

Chemical	Massachusetts RTK	New Jersey Work and Community RTK Act	Pennsylvania Worker and Community RTK Law	Rhode Island RTK
Methyl Methacrylate Monomer (CAS 80-62-6)	Listed	Listed	Listed	Listed
Quartz (CAS 14808-60-7)	Listed		Listed	
Dibenzoyl Peroxide (CAS 94-36-0)	Listed	Listed	Listed	Listed
Diisobutyl Phthalate (CAS 84-69-5)			Listed	Listed
Zinc Oxide (CAS 1314-13-2)	Listed	Listed	Listed	Listed

US California Proposition 65: WARNING! This product contains a chemical listed by the State of California as known to cause cancer, birth defects, or other reproductive harm.

Component	Regulation	% In Blend (approx.)	Remark
Quartz (14808-60-7)	ACGIH	30-50	Carcinogenic
Carbon Black (1333-86-4)	ACGIH	< 0.1	Carcinogenic

Canada

This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

WHMIS Classification

	(b)	Ţ
Class B-3: Flammable	Class C: Oxidizing	Class D-2A: Material
Chass B 5. I familiante	Material	Causing other toxic effects

International

International Inventories

Country or Region	Inventory	On Inventory? (Yes/No)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

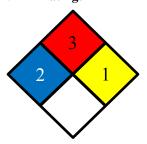
16. Other Information

Date Prepared or Revised: September 2014 **Supersedes:** March 2012

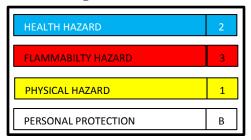


Additional Resin (white side) Classifications

NFPA Ratings

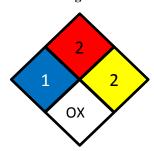


HMIS Rating

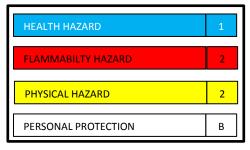


Additional Initiator (black side) Classifications

NFPA Ratings



HMIS Rating



Abbreviations

American Conference of Governmental Industrial Hygienists **ACGIH:**

Chemical Abstract Service Registry Number CAS No.:

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)

CPR: Controlled Product Regulations (Canada) DOT: Department of Transportation (U.S.) EPA: Environmental Protection Agency (U.S.)

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

High-Efficiency Particulate Air **HEPA:**

Hazardous Materials Identification System **HMIS: IARC:** International Agency for Research on Cancer IATA: **International Air Transport Association** International Maritime Dangerous Goods code **IMDG:**

LPP: Limité Permisible Ponderado (Chile)

NIOSH: National Institute of Occupational Safety and Health (U.S.)

National Fire Protection Association (US) NFPA: National Toxicology Program (US) NTP:

Occupational Safety and Health Administration (U.S.) **OSHA:**

PEL: Permissible Exposure Limit

Superfund Amendments and Reauthorization Act (U.S. EPA) **SARA:**

Safety Data Sheet SDS:

STEL: Short Term Exposure Limit (15 minute Time Weighted Average)

STOT: Specific Target Organ Toxicity (GHS Classification)

Threshold Limit Value TLV:

TSCA: Toxic Substances Control Act (U.S.)

Time Weighted Average (exposure for 8-hour workday) TWA:

United States U.S.:

Volatile Organic Compounds VOC:

Canadian Workplace Hazardous Materials Information System WHMIS:



Disclaimer

This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Co. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this SDS. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

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Internal

FOR INTERNAL USE ONLY

AT Resin:

XFLM1C – 90% Cartridge

AT Initiator:

XOP - 10% Cartridge