

1. Identification

Product Identification

Product Identifier: AT-XP® (AT-XP10, AT-XP13, AT-XP30)
Recommended Use: Two Component High Strength Acrylic-Based 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-XP® 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 (teal side) GHS Classification



Physical Hazards:	Not Classified.	
Health Hazards	Skin Corrosion/Irritation	Category 2
	Serious Eye Damage/Irritation	Category 2A
	Sensitization, Skin	Category 1
Environmental Hazards:	Not Classified.	
Signal Word:	WARNING!	
Hazard Statements:	Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.	
Precautionary Statements:		
Prevention:	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. Do not eat, drink or smoke when using this product. Do not breathe mist or vapor. Wash hands thoroughly after handling.	
Response:	If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If eye irritation persists: 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.	
Storage:	Store locked up. Store in a well-ventilated place. Store between 32-80°F (0-27°C).	
Disposal:	Dispose of contents/container in accordance with local/regional/national regulations.	

Initiator (white or tan side) GHS Classification



Physical Hazards:	Flammable Liquids	Category 4
Health Hazards	Serious Eye Damage/Irritation	Category 2A
	Sensitization, Skin	Category 1

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Environmental Hazards: Acute Aquatic Environment Hazard Category 1
Chronic Aquatic Environment Hazard Category 1

Signal Word: **WARNING!**
Hazard Statements: Combustible liquid. Causes serious eye irritation. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Contaminated clothing must not be allowed out of the workplace. Avoid release to the environment.

Response: In case of fire: Use appropriate media 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: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage: Store locked up. Store in a well-ventilated place. Store between 32-80°F (0-27°C).

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-XP. Upon combination an innocuous solid is formed which does not present any immediate hazards. Upon grinding or cutting the cured product the following hazards may apply.



Health Hazard: Carcinogenicity Category 1A
STOT, Repeated Exposure Category 2 (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 (teal side)

Chemical Name	CAS Number	Weight %
Portland Cement	65997-15-1	20-30
Calcined Clay	66402-68-4	10-20
Ethoxylated Bisphenol-A Dimethacrylate	41637-38-1	10-20
Propylidynetimethyl Trimethyl Trimethacrylate	3290-92-4	10-20
Crystalline Silica, Quartz	14808-60-7	1-5
Tetrahydrofurfuryl methacrylate	2455-24-5	5-10

Initiator (white or tan side)

Chemical Name	CAS Number	Weight %
Dibenzoyl Peroxide	94-36-0	10-15
White Mineral Oil (petroleum)	8042-47-5	10-15
Titanium Dioxide	13463-67-7	5-10
Kaolin	1332-58-7	1-5
Silicon Dioxide	7631-86-9	1-5

4. 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. If redness, burning, or swelling persists, **consult a physician.**

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

Inhalation: Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, **consult a physician.**

Most Important Symptoms

Irritant effects. Rash. Sensitization. Prolonged exposure may cause chronic effects.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Extinguish with foam, carbon dioxide, dry powder, or water fog.

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

Hazards during Fire-Fighting: Irritating and toxic gases/fumes may be released during a fire. May re-ignite after fire is extinguished. Sealed containers may rupture when heated.

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.

6. Accidental Release Measures

Personal Precautions

Keep unnecessary personnel away. 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. Clean surface thoroughly to remove residual contamination.

Large spills: Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. 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.

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.

7. Handling and Storage

Handling

Keep away from open flame, hot surfaces, and sources of ignition. Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. When using not drink, eat, or smoke. Use only in well-ventilated places. 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). Keep away from heat and sources of ignition. Store in a well-ventilated place. Store locked up. 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 sleeved shirts/long pants and other clothing as required to minimize contact. Avoid contact with unhardened Portland Cement products. If contact occurs, wash immediately with soap and water.
- Respirator Protection:** The use of a respirator is not required during regular use of this product. An NIOSH or MSHA approved 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

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
Portland Cement (65997-15-1)	5 mg/m ³ (Respirable) 15 mg/m ³ (Total dust)	1 mg/m ³ (TWA, respirable)	N/E
Quartz** (14808-60-7)	0.3 mg/m ³ (total dust) 0.1 mg/m ³ (respirable)	0.025 mg/m ³ (respirable)	N/E
Propylidynetrimethyl Trimethacrylate (3290-92-4)*	N/E	N/E	1 mg/m ³ (TWA)
Dibenzoyl Peroxide (94-36-0)	5 mg/m ³	5 mg/m ³	5 mg/m ³
Kaolin* (1332-58-7)	5 mg/m ³ (respirable) 15 mg/m ³ (total dust)	2 mg/m ³ (respirable)	5 mg/m ³ (respirable) 10 mg/m ³ (total)
Titanium Dioxide* (13463-67-7)	5 mg/m ³ (respirable) 15 mg/m ³ (total dust)	10 mg/m ³	N/E
Silicon Dioxide* (7631-86-9)	0.8 mg/m ³	N/E	6 mg/m ³
White Mineral Oil, petroleum (8042-47-5)	5 mg/m ³ (mist)	N/E	5 mg/m ³ (TWA, mist) 10 mg/m ³ (STEL, mist)

*Skin Designation: Material can be adsorbed through the skin

**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

<u>Property</u>	<u>Resin</u>	<u>Initiator</u>
Physical State:	Liquid, Paste	Liquid, Paste
Color:	Teal	White or Tan
Odor:	No Significant Odor	No Significant Odor
pH:	No data	No data
Flammability limit – lower %:	No data	No data
Flammability limit – upper %:	No data	No data
Vapor Pressure:	No data	No data

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Vapor Density:	No data	No data
Solubility:	Slight	Miscible
Freezing/Melting Point:	No data	No data
Boiling Point:	No data	No data
Flash Point:	>200 °F (>93.3 °C) Closed Cup	159 °F (70.6 °C) Closed Cup
Evaporation Rate:	No data	No data
Decomposition Temperature:	No data	122°F (50°C) (SADT)
Specific Gravity:	No data	1.58
VOC (after cure):	30 g/L	30 g/L
Kow:	No data	No data
Viscosity:	No data	No data
Corrosiveness:	Non-corrosive	Non-corrosive

10. Stability and Reactivity

Resin (teal side)

Reactivity:	Oxidizing, avoid contact with reducing agents.
Chemical Stability:	Stable under normal storage conditions.
Condition to Avoid:	Heat, sparks, flame, elevated temperatures.
Substances to Avoid:	Oxidizing and reducing agents.
Hazardous Reactions:	The product is stable if stored and handled as prescribed/indicated. Hazardous polymerization can occur with excessive heat.
Decomposition Products:	Carbon dioxide, carbon monoxide, oxides of nitrogen, and other organic compounds.

Initiator (white or tan side)

Reactivity:	This product is stable and non-reactive under normal conditions.
Chemical Stability:	Stable under normal storage conditions.
Condition to Avoid:	Avoid conditions over 113°F (45°C).
Substances to Avoid:	Rust, iron, copper. Hazardous decomposition will occur when in contact with acids, alkalies, heavy metal, reducing agents, and peroxide accelerators.
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 grinding/cutting cured product may irritate the respiratory tract.
Skin contact:	Causes skin irritation.
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-XP Resin (CAS mixture)	Acute, Dermal, LC50	Rabbit >1000 mg/kg
	Acute, Oral, LD50	Rat >5000 mg/kg
AT-XP Initiator (CAS mixture)	Acute, Dermal, LC50	Rabbit >1000 mg/kg
	Acute, Oral, LD50	Rat >5000 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:	No data available.
Carcinogenicity:	May cause cancer. Both components of this product contain ingredients that are listed carcinogens. Quartz and Titanium Dioxide are considered carcinogens only in their inhalable form. Due to the nature of this product inhalation is highly unlikely.

Exposure to respirable Quartz and Titanium Dioxide 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 Carcinogenicity

Quartz (14808-60-7) 1 Carcinogenic to humans.
 Titanium Dioxide (13463-67-7) 2B Possibly Carcinogenic to humans.
 Iron Oxide (1309-37-1) 3 Not classifiable as to carcinogenicity to humans.
 Dibenzoyl Peroxide (94-36-0) 3 Not classifiable as to carcinogenicity to humans.
 Silicon Dioxide (7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Quartz (14808-60-7) Known to be Human Carcinogen.
 No data available.
 Due to the physical form of this product it is not an aspiration hazard.

Reproductive toxicity:

Aspiration hazard:

Specific target organ toxicity:

Single exposure

Repeated exposure

No data available.

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 the components and the ecotoxicity of similar products. Resin is not classified as environmentally hazardous. Initiator is classified as very toxic to aquatic life with long lasting effects. Avoid release to the environment.

Supporting Data

Component	Species	Test Result
Tetrahydrofurfuryl Methacrylate (2455-24-5) Aquatic, Fish, LC50	Fathead minnow	31.1-38.8 mg/l, 96 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

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available for this product.

Partition coefficient n-octanol / water (log Kow)

Dibenzoyl Peroxide (94-36-0) 3.46

Ethoxylated Bisphenol-A Dimethacrylate 5.3 - 5.62

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:

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 (teal side)

Resin is not regulated as a dangerous good for transportation.

Hardener (white or tan side)

UN number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Standard Dibenzoyl Peroxide), 9, III, Marine Pollutant
Precautions: Marine Pollutant
Required Labels: 9
ERG Code (IATA): 9L
EmS (IMDG): F-A, S-F

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.

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.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.
CERCLA Hazardous Substance List (40 CFR 302.4): Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance: No
SARA 311/312 Hazardous chemical: Yes
SARA 313 (TRI reporting)

Chemical Name	CAS Number	% by weight
Dibenzoyl Peroxide	94-36-0	10-15

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

Component	Regulation	% In Blend (approx.)	Remark
Quartz (14808-60-7)	ACGIH	10-20	Carcinogenic
Titanium Dioxide (13463-67-7)	ACGIH	5-10	Carcinogenic
Carbon Black (1333-86-4)	ACGIH	< 0.1	Carcinogenic

US State Right-To-Know Lists

Chemical	Massachusetts RTK	New Jersey Work and Community RTK Act	Pennsylvania Worker and Community RTK Law	Rhode Island RTK
Portland Cement (CAS 65997-15-1)	Listed		Listed	
Quartz (CAS 14808-60-7)	Listed		Listed	

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Dibenzoyl Peroxide (CAS 94-36-0)	Listed	Listed	Listed	Listed
Kaolin (CAS 1332-58-7)	Listed		Listed	
Silicon Dioxide (CAS 7631-86-9)	Listed		Listed	
Titanium Dioxide (CAS 13463-67-7)	Listed		Listed	
White Mineral Oil (CAS 8042-47-5)	Listed		Listed	

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

	
Class B-3: Combustible Liquid	Class D-2B: Material Causing other toxic effects

International

International Inventories

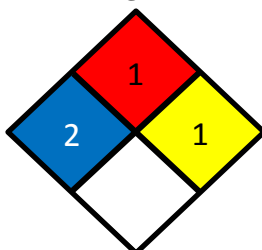
Country or Region	Inventory	On Inventory? (Yes/No)
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)/ Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
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 (teal side) Classifications

NFPA Ratings



HMIS Rating

HEALTH HAZARD	2
FLAMMABILITY HAZARD	1
PHYSICAL HAZARD	1
PERSONAL PROTECTION	B

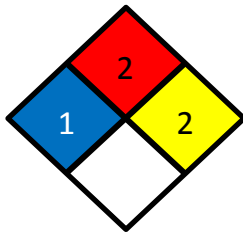
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Additional Initiator (white or tan side) Classifications

NFPA Ratings



HMIS Rating

HEALTH HAZARD	1
FLAMMABILITY HAZARD	2
PHYSICAL HAZARD	2
PERSONAL PROTECTION	B

Abbreviations

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS No.:	Chemical Abstract Service Registry Number
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
HEPA:	High-Efficiency Particulate Air
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association
IMDG:	International Maritime Dangerous Goods code
NIOSH:	National Institute of Occupational Safety and Health (U.S.)
NFPA:	National Fire Protection Association (US)
NTP:	National Toxicology Program (US)
OSHA:	Occupational Safety and Health Administration (U.S.)
PEL:	Permissible Exposure Limit
SARA:	Superfund Amendments and Reauthorization Act (U.S. EPA)
SDS:	Safety Data Sheet
STEL:	Short Term Exposure Limit (15 minute Time Weighted Average)
STOT:	Specific Target Organ Toxicity (GHS Classification)
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act (U.S.)
TWA:	Time Weighted Average (exposure for 8-hour workday)
U.S.:	United States
VOC:	Volatile Organic Compounds
WHMIS:	Canadian Workplace Hazardous Materials Information System

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-XP Resin:	AT-XP Hardener:
XCOM3B – 90% Cartridge	XCOM3A – 10% Cartridge