SAFETY DATA SHEET

1. Identification

Product Name:	Overtime Crosslinker
Supplier Details:	Game Time Coatings 17 Collins Industial Place, Suite C North Little Rock, Arkansas, 72113
Chemical Family:	Polyfunctional Aziridine
Use:	Raw material for coatings, inks, adhesives, sealants, or elastomers in industrial applications
Restrictions on use:	Do-It-Yourself Applications, Medical applications

2. Hazards Identification

GHS Classification

Acute toxicity (Oral):	Category 4
Serious eye damage:	Category 1
Skin sensitisation:	Category 1
Germ cell mutagenicity:	Category 2
Specific target organ toxicity - repeated exposure:	Category 2 (Kidney)

GHS Label Elements

Hazard pictograms:

Signal word: Danger

Hazard statements:
Harmful if swallowed.
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of causing genetic defects.
May cause damage to organs (Kidney) through prolonged or repeated exposure.

Precautionary statements:

Prevention:
Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.
Do not breathe dust, mist, gas, vapors or spray.
Wash skin and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing must not be allowed out of the workplace.
Wear permeation resistant protective gloves and clothing. Wear eye and face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a doctor or emergency medical facility (i.e., 911).
If skin irritation or rash occurs: Get medical attention.
Wash contaminated clothing before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.

3. Composition/Information on Ingredients

Hazardous Components

Concentration	Components	CAS-No.
95 - 100%	Polyfunctional aziridine	64265-57-2

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

4. First Aid Measures

Most Important Symptom(s)/Effect(s)

Acute: Harmful if swallowed., Causes eye damage and possible blindness., May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Use lukewarm water if possible. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Call a physician immediately.

Skin Contact

In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Get medical attention. Wash clothing and shoes before reuse.

Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

5. Firefighting Measures

Suitable Extinguishing Media: All extinguishing media are suitable., water spray for large fires.

Unsuitable Extinguishing Media No Data Available

Fire Fighting Procedure
Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Do not spray fire directly. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

Hazardous Decomposition Products
By Fire and Thermal Decomposition: Nitrogen oxides (NOx), other aliphatic fragments which have not been determined, Hydrocarbons

Unusual Fire/Explosion Hazards
Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback.

6. Accidental Release Measures

Spill and Leak Procedures
Cleanup personnel must use appropriate personal protective equipment. Evacuate and keep unnecessary people out of spill area. Remove all sources of ignition, including flames, heat, and sparks. Ventilate area to remove vapors or dust. Dike or dam spilled material and control further spillage, if possible. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Wash spill area with soap and water.

7. Handling and Storage

Handling/Storage Precautions
Do not get in eyes. Do not get on skin or clothing. Do not taste or swallow. Avoid inhalation of vapour or mist. Proper ventilation and appropriate personal protective equipment should be used when handling & processing this product. Store in a dry place away from excessive heat in original or similar containers. Containers should be kept tightly closed to prevent contamination. Ground and bond containers and equipment before transferring to avoid static sparks.

Storage Period:
6 Months

Storage Temperature

Minimum:	5 °C (41 °F)
Maximum:	40 °C (104 °F)

Storage Conditions
Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Substances to Avoid
Oxidizing agents, Anhydrides, Acids, Copper, Copper compounds, Silver, Silver compounds

8. Exposure Controls/Personal Protection

The recommendations in this section should not be a substitute for a personal protective equipment (PPE) assessment performed by the employer as required by 29 CFR 1910 Subpart I.

Exposure Limits

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

Industrial Hygiene/Ventilation Measures
General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination. Curing ovens must be ventilated to prevent the build up of explosive atmospheres and to prevent off gases from entering the work place.

Respiratory Protection
A supplied air respirator with a full facepiece or hood that is operated in a positive pressure, pressure-demand, or continuous flow mode is mandatory during spray application or whenever airborne concentrations are unknown. An air purifying respirator with organic vapor cartridge may be worn in non-spray applications where airborne concentrations of aziridine monomer are known to be above the PEL or TLV but less than 10 times the PEL or TLV. Use fresh cartridge at the beginning of each work shift.

Hand Protection
Ensure gloves remain in good condition during use and replace if any deterioration is observed.
Permeation resistant gloves., Neoprene gloves, Butyl rubber gloves., Nitrile rubber gloves.

Eye Protection
Chemical resistant goggles must be worn., Chemical safety goggles in combination with a full face shield if a splash hazard exists.

Skin Protection
Permeation resistant clothing

Additional Protective Measures
Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

9. Physical and Chemical Properties

State of Matter:	liquid
Appearance:	liquid
Color:	No Data Available
Odor:	amine-like
Odor Threshold:	No Data Available
pH:	No Data Available
Boiling Point:	> 175 °C (347 °F) Decomposition

Flash Point:	253 °C (487.4 °F) (closed cup)
Evaporation Rate:	No Data Available
Lower explosion limit:	No Data Available
Upper Explosion Limit:	No Data Available
Vapor Pressure:	No Data Available
Vapor Density:	No Data Available
Density:	1.07 g/cm³ @ 20 °C (68 °F)
Relative Vapor Density:	No Data Available
Specific Gravity:	No Data Available
Solubility in Water:	No Data Available
Partition Coefficient: n-octanol/water:	No Data Available
Auto-ignition Temperature:	345 °C (653 °F)
Decomposition Temperature:	> 175 °C (> 347 °F) No decomposition if used as directed. Stable under recommended storage conditions. The product is chemically stable.
Unblocking Temperature:	No Data Available
Dynamic Viscosity:	200 mPa.s @ 20 °C (68 °F)
Kinematic Viscosity:	No Data Available
Bulk Density:	No Data Available
Molecular Weight:	No Data Available
Pour point:	-58 °C (-72.4 °F)

10. Stability and Reactivity

Hazardous Reactions
Exothermic reaction with strong acids.

Stability
Stable under normal conditions.

Materials to Avoid
Oxidizing agents, Anhydrides, Acids, Copper, Copper compounds, Silver, Silver compounds

Conditions to Avoid
Direct heating, dirt, chemical contamination, sunlight, UV or ionising radiation. Avoid acidic conditions. Avoid contact with moisture / water. Protect from freezing.

Hazardous Decomposition Products
By Fire and Thermal Decomposition: Nitrogen oxides (NOx), other aliphatic fragments which have not been determined, Hydrocarbons

11. Toxicological Information

Likely Routes of Exposure:
Skin Contact
Eye Contact
Ingestion
Inhalation

Health Effects and Symptoms

Acute: Harmful if swallowed., Causes eye damage and possible blindness., May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash.

Chronic: Suspected of causing genetic defects., May cause kidney damage.

Toxicity Data for: Crosslinker CX-100

Data on the product is not available.

Acute Oral Toxicity
Acute toxicity estimate: 501.55 mg/kg (Calculation method)

Toxicity Data for: Polyfunctional aziridine

Acute Oral Toxicity
LD50: 300 - 2,000 mg/kg (rat, female) (OECD Test Guideline 423)

Acute Inhalation Toxicity
LC50: 0.252 mg/l, 4 h, dust/mist (OECD Test Guideline 403)
Not a relevant route of exposure

Skin Irritation
Draize Test, Mild skin irritation

Eye Irritation
rabbit, Severely irritating

Sensitization
Skin sensitization (local lymph node assay (LLNA)):: positive (Mouse, OECD Test Guideline 429)

Repeated Dose Toxicity
28 d, Oral: LOAEL: 100 mg/kg, (rat, male/female, daily)

Mutagenicity
Genetic Toxicity in Vitro:
Ames test: positive (Salmonella typhimurium, Metabolic Activation: with/without)
Ames test: negative (Salmonella typhimurium, Metabolic Activation: without)

Genetic Toxicity in Vivo:
Micronucleus Assay: positive (Mouse, male, intraperitoneal)
positive

Carcinogenicity

No data available.

Toxicity to Reproduction/Fertility

No data available.

Developmental Toxicity/Teratogenicity

No data available.

Carcinogenicity:
No carcinogenic substances as defined by IARC, NTP and/or OSHA

12. Ecological Information

Ecological Data for: Crosslinker CX-100

Data on the product is not available.

Ecological Data for Polyfunctional aziridine
Additional Ecotoxicological Remarks
No data available for this product.

13. Disposal Considerations

Waste Disposal Method
Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions
Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty. Empty containers retain product residue (dust, liquid, vapor and/or gases) and can be dangerous.

14. Transportation Information

Land transport (DOT)

Proper Shipping Name:	Other regulated substances, liquid, n.o.s. (contains 2-Methylaziridine)
Hazard Class or Division:	9
UN/NA Number:	NA3082
Packaging Group:	III
Hazard Label(s):	CLASS 9

RSPA/DOT Regulated Components:
2-Methylaziridine

Reportable Quantity: 4536 kg (10000 lb)

Sea transport (IMDG)

Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains 1-Aziridinepropanoic acid, 2-methyl-, 1,1'-[2-ethyl-2-[[3-(2-methyl-1-aziridinyl)-1-oxopropoxy]methyl]-1,3-propanediyl] ester)
Hazard Class or Division:	9
UN number:	UN3082
Packaging Group:	III
Hazard Label(s):	MISCELLANEOUS
Marine pollutant:	Not a Marine Pollutant

Air transport (ICAO/IATA)

Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (contains 1-Aziridinepropanoic acid, 2-methyl-, 1,1'-[2-ethyl-2-[[3-(2-methyl-1-aziridinyl)-1-oxopropoxy]methyl]-1,3-propanediyl] ester)
Hazard Class or Division:	9
UN number:	UN3082
Packaging Group:	III

Hazard Label(s): MISCELLANEOUS
Marine pollutant: Environmentally Hazardous

15. Regulatory Information

United States Federal Regulations
US. Toxic Substances Control Act: Listed on the Active Portion of the TSCA Inventory.

No substances are subject to TSCA 12(b) export notification requirements.

US. EPA CERCLA Hazardous Substances (40 CFR 302.4) Components:
None

SARA Section 311/312 Hazard Categories:
Refer to hazard classification information in Section 2.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components:
None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components:
None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):
Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

State Right-To-Know Information
The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

Concentration	Components	CAS-No.
95 - 100%	Polyfunctional aziridine	64265-57-2
0.1 - 1%	Dimethylethanolamine	108-01-0

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:

Concentration	Components	CAS-No.
0.1 - 1%	Dimethylethanolamine	108-01-0

Pennsylvania Right to Know Special Hazard Substance List:

Concentration	Components	CAS-No.
<0.1%	2-Methylaziridine	75-55-8

Massachusetts Right to Know Extraordinarily Hazardous Substance List:

Concentration	Components	CAS-No.
<0.1%	2-Methylaziridine	75-55-8

California Proposition 65 List:

Concentration	Components	CAS-No.

<0.1%	2-Methylaziridine	75-55-8

CFATS (Chemical Facility Anti-Terrorism Standards) Chemicals
To the best of our knowledge, this product does not contain Appendix A Chemicals of Interest (COI), at or above the Screening Threshold Quantity (STQ), as defined by the Department of Homeland Security Chemical Facility Anti-terrorism Standard (CFATS, 6 CFR Part 27).

Based on information provided by our suppliers, this product is considered "DRC Conflict Free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 2012-08-22).

16. Other Information

Information contained in this Safety Data Sheet (SDS) is believed to be accurate but is furnished without warranty, express or implied, including warranties of merchantability or fitness for a particular purpose. The information relates only to the specific material designated herein. Game Time Coatings assumes no legal responsibility for use of or reliance upon the information in this SDS and such information shall in no case be considered a part of our terms and conditions of sale. The user is responsible for determining whether the Game Time Coatings product is suitable for user's method of use or application. Game Time Coatings is not liable for any failure to observe the precautionary measures described in this SDS or any misuse of the product.