

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Trade name : Crosslinker A
CAS No : 64265-57-2

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Crosslinker for coatings

1.3. Details of the supplier of the safety data sheet

Coatings2Go
399 Concord Street
Carlisle MA, 01741 - USA
T 1-978-369-7411 - F 978-371-9940
info@coatings2go.com - COATINGS2GO.COM

1.4. Emergency telephone number

Emergency number : 1-978-369-7411

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Eye Dam. 1 H318
Skin Sens. 1 H317
Muta. 2 H341
STOT RE 2 H373

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

GHS08

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
H341 - Suspected of causing genetic defects
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P260 - Do not breathe vapours
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear eye protection, face protection, protective gloves
P302 + P352 - If on skin: Wash with plenty of soap and water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a a POISON CENTER, a doctor
P314 - Get medical advice/attention if you feel unwell
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P362 + P364 - Take off contaminated clothing and wash it before reuse
P405 - Store locked up
P501 - Dispose of contents/container to approved facilities in accordance with local/regional/national regulations

2.3. Other hazards

No additional information available

Crosslinker A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type : Substance
Name : Polyfunctional Aziridine Crosslinker
CAS No : 64265-57-2

Name	Product identifier	%	GHS-US classification
Polyfunctional Aziridine Crosslinker	(CAS No) 64265-57-2	50 - 100	Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 STOT RE 2, H373

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Get medical attention immediately. Call a POISON CENTER or doctor/physician. Remove to fresh air and keep at rest in a position comfortable for breathing. It may be dangerous to the person providing first aid to give mouth-to-mouth respiration. If unconscious, place in the recovery position and seek medical advice. Maintain an open airway. Loosen tight clothing. In case of inhalation of decomposition in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

First-aid measures after skin contact : Get immediate medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Wash skin immediately with plenty of soap and water for at least 15 minutes. If redness, itching or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

First-aid measures after eye contact : Get medical attention immediately. Immediately call a POISON CENTER or doctor/physician. Immediately flush with plenty of water for at least 15 minutes. If redness, itching, or a burning sensation develops, have eyes examined and treated by medical personnel.

First-aid measures after ingestion : Get immediate medical advice/attention. Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Give one or two glasses of water to drink and refer to medical personnel or take direction from either a physician or a poison control center. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If unconscious, place in the recovery position and seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Serious effects may be delayed following exposure.

Symptoms/injuries after skin contact : May cause an allergic skin reaction.

Symptoms/injuries after eye contact : Causes serious eye damage.

Symptoms/injuries after ingestion : Not expected to be a primary route of exposure. May cause chemical burns of the mouth, throat, and esophagus.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. In case of inhalation of decomposition in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : The pressure in sealed containers can increase under the influence of heat.

Reactivity : The product is stable at normal handling and storage conditions.

5.3. Advice for firefighters

Firefighting instructions : Evacuate unnecessary personnel. No action shall be taken involving any personal risk without suitable training.

Crosslinker A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus with full facepiece and full protective clothing. If contact occurs with material or its solutions, immediately flush with water and remove contaminated clothing.
- Special protective equipment for fire fighters : Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and full protective equipment.
- Other information : Decomposition products can be toxic and irritating. Do not allow run-off from fire fighting to enter drains or water courses. Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, aldehydes and organic acids.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : No action shall be taken involving any personal risk without suitable training. Evacuate unnecessary personnel. Evacuate area. Do not touch or walk through spilled material. Do not breathe vapour. Provide adequate ventilation.

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing. Wear skin, eye and respiratory protection during cleanup. Do not breathe vapour. In case of inadequate ventilation wear respiratory protection.
- Emergency procedures : Stop leak if safe to do so. Ventilate the area.

6.1.2. For emergency responders

- Protective equipment : In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Wear skin, eye and respiratory protection during cleanup. Floors may become slippery if spilled.
- Emergency procedures : Evacuate non-emergency personnel. Evacuate area. Do not breathe vapor or mist. Absorb and/or contain spill with inert material, then place in suitable container. Shovel into suitable and closed container for disposal.

6.2. Environmental precautions

Avoid release to the environment. Do not discharge the product into the environment. Clean up any spills as soon as possible, using an absorbent material to collect it. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

6.3. Methods and material for containment and cleaning up

- For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Collect all waste in suitable and labelled containers and dispose according to local legislation.
- Methods for cleaning up : Absorb and/or contain spill with inert material, then place in suitable container. Dispose of waste using a licensed waste disposal contractor. Place in designated, labeled waste container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Use personal protective equipment as required. Avoid breathing vapors. In case of inadequate ventilation wear respiratory protection. Avoid contact with skin, eyes, or clothing. Do not eat, drink or smoke when using this product. Remove all contaminated clothing and footwear before entering eating area. Wash thoroughly after handling.
- Hygiene measures : Do not eat, drink or smoke when using this product. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Do not store in unlabelled containers. Keep locked up. Keep only in the original container in a cool, well-ventilated place. Opened containers must be carefully closed and kept upright to avoid leakage. Store at temperatures below 38°C. Store in a well-ventilated place. Keep container tightly closed. Store away from incompatible materials.
- Incompatible materials : Strong oxidizing agents. Acids.

7.3. Specific end use(s)

No additional information available

Crosslinker A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls : Because specific work environments and material handling procedures vary, safety procedures should be developed for each intended application. No ACGIH TLV or OSHA PEL assigned to this product. Minimize exposure in accordance with good hygiene practices. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment : Personal protective equipment should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling the product. Protective clothing. Gloves. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for protective clothing : Butyl rubber

Hand protection : Chemical resistant impervious gloves should be worn when handling chemical products if a risk assessment indicates this is necessary. Consult glove manufacturer for suitability for the specific workplace. Wear suitable gloves resistant to chemical penetration.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. . Chemical goggles or safety glasses. Face shield if splashing is possible.

Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Respiratory protection : In case of inadequate ventilation wear respiratory protection. Observe OSHA regulations for respirator use (29 CFR 1910.134). If respiratory protection is needed, use a NIOSH certified respirator with an Assigned Protection Factor (APF) of at least 10. Air-purifying or fresh air-supplied respirators may be necessary for spray applications or high temperature use which may produce inhalation exposure. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Light yellow
Odour	: Amine-like
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 253 °C Setflash
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.08
Density	: 1.08 g/cm ³
Solubility	: Partially soluble in hot and cold water.
Log Pow	: -1.4
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 200 mPa.s

Crosslinker A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Explosive properties : No data available.
Oxidising properties : No data available.
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous polymerization should not occur.

10.4. Conditions to avoid

No special recommendations.

10.5. Incompatible materials

Acids. Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Nitrogen oxides. Aldehydes. Organic acids.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Polyfunctional Aziridine Crosslinker (64265-57-2)

LD50 oral rat	2000 mg/kg
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Suspected of causing genetic defects.
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Symptoms/injuries after inhalation	: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Serious effects may be delayed following exposure.
Symptoms/injuries after skin contact	: May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Not expected to be a primary route of exposure. May cause chemical burns of the mouth, throat, and esophagus.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Crosslinker A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Polyfunctional Aziridine Crosslinker (64265-57-2)	
LC50 fishes 1	> 100 mg/l Cyprinus carpio, 96 h
LC50 other aquatic organisms 1	3.8 - 5.5 mg/l Algae, 72 h
EC50 Daphnia 1	81 mg/l, 48 h
NOEC (acute)	0.92 mg/l Fresh water algae, 48 h
NOEC (chronic)	100 mg/l Fish - cyprinus carpio, 96 h

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Polyfunctional Aziridine Crosslinker (64265-57-2)	
Log Pow	-1.4
Bioaccumulative potential	Low.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

- Other adverse effects : No known significant effects or critical hazards.
Effect on ozone layer : No additional information available
Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations. Do not discharge into drains or the environment.
Sewage disposal recommendations : Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Waste disposal recommendations : This material and its container must be disposed of in a safe way, and as per local legislation. The generation of waste should be avoided or minimized whenever possible. Incineration or landfill should only be considered when recycling is not feasible.
Additional information : Do not re-use empty containers without proper cleaning or reconditioning. Empty containers contain product residue. Observe all hazard precautions. If container is to be disposed, ensure all product residues are removed prior to disposal. Remove all product residue from container and puncture or otherwise destroy the empty container before disposal.

SECTION 14: Transport information

DOT

- Transport document description : Not regulated
DOT NA no. : Not regulated
DOT Proper Shipping Name : Not regulated

Additional information

- Other information : No supplementary information available.

ADR

- Transport document description :
Class (ADR) : Not regulated

Transport by sea

- Class (IMDG) : Not subject

Air transport

- Class (IATA) : Not subject

Crosslinker A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

Crosslinker A (64265-57-2)	
EPA TSCA Regulatory Flag	All components are included or exempt from listing on the TSCA Inventory of Chemical Substances.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

15.2. International regulations

CANADA

All components of this product are listed on the Canada Domestic Substances List (DSL).

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

Crosslinker A (64265-57-2)	
All components of this product are listed on the Canada Domestic Substances List (DSL).	

15.3. US State regulations

Crosslinker A(64265-57-2)	
State or local regulations	WARNING: This product contains <0.1% chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

SECTION 16: Other information

Revision date	: 10/06/2014
Data sources	: SDS, Supplier.
Training advice	: Educate and train employees in the safe use and handling of this product. Follow all label instructions.
Other information	: The information contained in the Material Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

Full text of H-phrases: see section 16:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Muta. 2	Germ cell mutagenicity, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H341	Suspected of causing genetic defects
H373	May cause damage to organs through prolonged or repeated exposure

HMIS III Rating

Health	: 3* Serious hazard, chronic effect
Flammability	: 1 Slight Hazard
Physical	: 1 Slight Hazard
Personal Protection	: X

SDS US (GHS HazCom 2012)

Crosslinker A

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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