SAFETY DATA SHEET

Section 1: PRODUCTS AND COMPANY IDENTIFICATION

Product Name: VANDLGAURD® ISOFREE™ Part B

Rainguard Brands, LLC.
RainguardPro
2736 West McDowell Road
Phoenix, AZ 85009
United States of America

SDS Contact: SDS Coordinator
Telephone: (949) 515-8800

Recommended use: Industrial use, Manufacture of substances

Restrictions on use: N/A

For Chemical Emergency, Spill, Lea, Exposure or Accident, call **CHEMTREC** day or night at the following number:

DOMESTIC NORTH AMERICA:
(800)424-9300
INTERNATIONAL: (703) 527-3887 (collect calls accepted)

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity (oral), Category 4
Serious eye damage/eye irritation, Category 1
Sensitization — Skin, category 1A
Germ cell mutagenicity, Category 2
Specific target organ toxicity — Repeated exposure, Category 2
Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects:

Harmful if swallowed causes serious eye damage. Suspected of causing genetic defects. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure.

Label Elements

Hazard Pictogram

Single 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 through prolonged or repeated exposure.

Precautionary statements:

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood.

Wash skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician

If exposed or concerned: Get medical advice/attention
Get medical advice/attention if you feel unwell
Specific treatment (see supplemental first aid instruction on this label)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration
Polyfunctional Aziridine	64265-57-2	>99
Propylenen Imine	75-55-8	< 100 ppm

Section 4: FIRST AID MEASURES

Eye Contact:
Immediately flush the eyes with large quantities of running water for at least 15 minutes, while holding the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids with water. Do no attempt to neutralize with chemical agents. Obtain medical attention as soon as possible.

Skin Contact:
Immediately flush with large quantities of running water for at least 15 minutes, and then wash off of skin with plenty of soap and water. If redness, itching or burning sensation develops, get medical attention. Wash (or discard) contaminated clothing. Discard or decontaminate footwear before reuse.

Inhalation:
Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is labored, give oxygen. Obtain medical attention as soon as possible.

Ingestion:
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. Obtain medical attention as soon as possible.

Section 5: FIRE FIGHTING MEASURES

FLASH POINT: 200.5 °
C (1013 hPa) (EU method A.9, Closed cup)
AUTOIGNITION TEMPERATURE: Not established

HAZARDOUS THERMAL DECOMPOSIION PRODUCTS:
In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, organic acids, nitrogen oxides (NO, NO2, etc.), ammonia, amines.

EXTINGUISHING MEDIA:
Use water fog, foam, carbon dioxide, dry chemical, halogenated agents. Use a water spray to cool fire-exposed containers.

SPECIAL PROCEDURES:
Wear self-contained positive breathing apparatus (SCBA) and complete personal protective equipment. Remove all ignition sources. Use a water spray to cool fire-exposed containers.

Section 6: ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES:
Emergency clean-up workers should wear protective clothing (see Section 8). Remove any sources of fire, heating elements, etc. Contain spill. Soak up material with absorbent and shovel into a chemical waste container. Decontaminate with weak acid solution such as a 1% acetic acid solution, or one part white vinegar to four parts water.

ENVIRONMENTAL PRECAUTIONS:
Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment

WASTE DISPOSAL:
Incinerate or dispose of in approved landfill. Dispose of as an aqueous waste after reaction with weak acid, with approval of local, state, or federal agency.

Section 7: HANDLING AND STORAGE

General Handling:
Wear protective clothing. (See Section 8) Open containers in a well-ventilated area to avoid exposure to residual Propyleneimine that may have collected in headspace. Avoid breathing vapors or aerosols. Prevent skin and eye contact. A sensitized individual should not be exposed to the product which caused the sensitization.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS:
Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

EYE AND FACE PROTECTION:
Wear chemical tight goggles and full face shield.

RESPIRATORY PROTECTION:
Protect against inhaling vapors or aerosols by the use of local exhaust or hood. Where engineered measures are not feasible, for non-spray applications an air purifying respirator with organic vapor cartridge may be worn. For spray applications a NIOSH certified full face piece supplied-air respirators provide the highest protection. Where the use of supplied-air respirators is not feasible, NIOSH-certified full face piece air purifying respirators equipped with high efficiency filters may be used. For fire-fighting or other emergency situations use a NIOSH/MSHA approved positive pressure self-contained breathing apparatus.

PROTECTIVE CLOTHING:
Use gloves, arm covers and apron determined to be impervious under the conditions of use. Additional protection, such as full body suit and boots may be required depending on conditions. Remove contaminated clothing and wash before re-wearing.

ADDITIONAL PROTECTIVE MEASURES:

Local exhaust should be used when appropriate to control employee exposure. Safety showers and eyewash facilities must be immediately available. Employees should wash their hands and face before eating, drinking, or using tobacco products.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid	**Flash point (°C):**	200.5°C (1013 hPa) (EU method A.9, closed cup)
Color:	Clear yellowish	**Initial boiling point (°C):**	243.8 +0.5°C (OECD 103; EU method A.2)
Odor:	Amine-like	**Final boiling point (°C):**	No data available
Odor threshold:	No data available	**Evaporation rate:**	No data available
pH:	10.2 (10 % aqueous solution)	**Initial Boiling Point (°C):**	No data available
Melting point (°C):	< -20	**Vapor pressure:**	3.51E-015 Pa (25°C) (estimated data; MPBPWIN v1.43)
Decomposition point (°C):	No data available	**Vapor density (kg/m3):**	1.074 (20°C) (OECD 109)
Critical temperature (°C):	No data available	**Solubility in water:**	Miscible (OECD 105; EU method A.6)
Autoignition Temperature (°C):	330°C (1013 hPa) (EU method A.15)	**Log Pow octanol/water at 20°C:**	Between 1.81 and 2.96 (estimated data; KOWWIN v1.68)
Flammability (solid, gas):	Not applicable (liquid)	**Viscosity:**	311 mPa.s (20°C) (OECD 114)
Upper/lower flammability or explosive limit:	No data available	**Volatile Organic Compounds, %:**	0.3
% Solids (Theoretical)	29.82		

Section 10: STABILITY AND REACTIVITY

Stability and Reactivity:

This product is considered stable

Materials to avoid:

Acidic materials, anhydrides, strong oxidizers.

Conditions to avoid:

Avoid contamination with acidic materials, heat, direct sunlight, ultraviolet radiation, strong oxidizing conditions and freezing conditions. Unstable at elevated temperatures and pressures or may react with water or acids with some release of energy, but not violently.

Hazardous Polymerization:

May occur if mixed with acidic materials.

Hazardous Decomposition Products:

Fumes. Carbon monoxide. Carbon dioxide.

Section 11: TOXICOLOGICAL INFORMATION

PRODUCT/ INGREDIENT	**ORAL LD50 (Rat)**	**DERMAL LD_{LO} (Rabbit)**
Polyfunctional Aziridine	3038 mg/kg	2 g/kg

Sensitization

Known skin sensitizer based on animal studies. Known respiratory sensitizer.

Chronic Toxicity

Repeated Exposure may cause allergic skin reaction. Inhalation may cause allergic respiratory reaction.

Carcinogenicity

Not listed as a carcinogenic by IRAC, NTP or ACGIH or regulated as a carcinogen by OSHA.

Mutagenicity

Positive activity has been reported for aziridine-based crosslinkers.

Eye Irritation

Eye corrosive based on animal studies.

Skin Irritation

Moderate skin irritant based on animal studies.

Section 12: ECOLOGICAL INFORMATION

Persistence and degradation

Not readily biodegradable: Aerobic biodegradation: 16.1% (day 28) (read-across) (OECD 301F; EU method C.4-D).
Not readily biodegradable (QSAR calculation; EPA v3.20/BIOWIN v4.10)

Bioaccumulate potential
Low potential for bioaccumulation (log Pow < 3)

Mobility in soil
Low potential for absorption

Section 13: DISPOSAL CONSIDERATIONS

Disposal Method:
Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

Container Disposal:
Empty container may contain product residue. Observe all personal protection precautions found in Section 8 when handling. Also, observe all product handling cautions as listed in this MSDS

Section 14: TRANSPORT INFORMATION

Land/Air/Ocean Transport
DOT/TDG Hazardous Material Description: Not Regulated
IATA: Not Regulated

Section 15: REGULATORY INFORMATION

United States

Superfund Amendments and Reauthorization Act (SARA):
Sections 311 / 312 HAZARD CATEGORIES: Under 40 CFR370.2, this product meets the following hazard categories: Immediate, Delayed.
Section 313 REPORTABLE INGREDIENTS: Ingredients in this product are not subject to notification.

TSCA (Toxic Substance Control Act): This material complies with all inventory requirements.

CERCLA (Comprehensive, Response, Compensation and Liability Act)
CERCLA Regulatory: None of the ingredients in the product are reportable under CERCLA.

PRODUCT/ INGREDIENT	**CAS Number**	**State Listing**
Polyfunctional Aziridine	64265-57-2	None found

Propylene Imine	75-55-8	NJ (2B), MA, PA (2)

California Prop 65
WARNING: This product contains less than 0.1% Propylene Imine (CAS No. 75-55-8) known to the State of California to cause cancer.

Canada
CEPA (Canadian Environmental Protection Act): CEPA (Canadian Environmental Protection Act): All components are on the DSL (Domestic Substances List).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

Europe
REACH: This material complies with all inventory requirements. REACH registration No: 01-2119963929-15

Harmonizing Codes: 2933.99.97 Heterocyclic compounds with nitrogen hetero-atom(s) only (con.): other

Section 16: OTHER INFORMATION

Full text of H- and EUH-statements:
Acute Tox. 4 (Oral) Acute toxicity (oral), Category 4
Eye Dam. 1 Serious eye damage/eye irritation, Category 1
Muta. 2 Germ cell mutagenicity, Category 2
Skin Sens. 1 Sensitization — Skin, Category 1
STOT RE 2 Specific target organ toxicity — Repeated exposure, Category 2
Harmful if swallowed
May cause an allergic skin reaction
Causes serious eye damage
Suspected of causing genetic defects
May cause damage to organs through prolonged or repeated exposure

HMIS Rating (Scale 0 - 4) NFPA RATINGS

Health =3
Fire =1
Reactivity =1

This information is based on our present knowledge and represents best opinion as to the proper use and handling of the product under normal,
foreseeable circumstances. Any use of the product which is not in conformance with this data sheet or product label, or which involves the use of
this product in combination with any other product or process is the responsibility of the user.