EPO-Guard™ EPO-203 Part B

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier — Mixture

Product Name / Trade Name — EPO-Guard™ EPO-203 Part B

Product use description — Curing agent

Details of the supplier of the safety data sheet

Company Identification — Res-Tek, Inc.
110 Riverside Drive
Cartersville, Georgia 30120
United States of America

Telephone — 1-888-737-8351 / 1-770-427-4034

Emergency telephone number — CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

Hazard classification

GHS Classification — Skin sens. 1; Skin corros. 1B; Serious eye damage 1; Repro. tox. 2; Acute tox., oral 4; Acute tox., dermal 4

Label elements

Hazard pictograms

Signal Word(s) — **DANGER**

Hazard Statement(s)

Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.

Hazards not otherwise classified

Harmful in contact with skin.
Harmful if swallowed.
Corrosive.
Severe skin irritant.
Severe eye irritant.
May cause sensitization by skin contact.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Concentration
Aliphatic Ether Amine	9046-10-0	40% – 70%
Alkyl glycidyl ether Cycloaliphatic Ammonium Salt	Trade secret	30% – 60%
Nonylphenol	84852-15-3	10% - 30%

Chemical family: Aliphatic Amines

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice

Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Inhalation

If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

Skin Contact

Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

Eye Contact

Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

Ingestion

Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.

Most important symptoms and effects, both acute and delayed

Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat. Eye disease. Skin disorders and Allergies. Asthma. Neurological disorders.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable extinguishing media

Alcohol-resistant foam.
Carbon dioxide (CO2).
Dry chemical.

Dry sand.
Limestone powder.

Special hazards arising from the substance or mixture

Specific hazards	May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.
Special protective equipment for fire-fighters	Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.
Further information	Do not allow run-off from fire fighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas.
Environmental precautions	Construct a dike to prevent spreading.
Methods and material for containment and cleaning up	Approach suspected leak areas with caution. Place in appropriate chemical waste container.
Additional advice	Open enclosed spaces to outside atmosphere. If possible, stop flow of product.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Use only in well-ventilated areas. Avoid breathing vapors and/or aerosols. Avoid contact with skin and eyes. Avoid contact with eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do not eat, drink or smoke.
Conditions for safe storage	Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures	Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Personal protection equipment

Respiratory protection	Wear appropriate respirator when ventilation is inadequate.

Skin protection (Hand protection/ Other) 	Butyl-rubber Nitrile rubber. Neoprene gloves. Impervious gloves. PVC disposable gloves. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Impervious clothing. Full rubber suit (rain gear). Rubber or plastic boots. Slicker Suit.
Eye/face protection 	Full face shield with goggles underneath. Chemical resistant goggles must be worn.
Special instructions for protection and hygiene	Discard contaminated leather articles. Wash hands at the end of each work shift and before eating, smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.
Exposure limit(s)	None established.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid. Clear to light yellow.
Odor	Ammonical.
Odor threshold	Not available.
pH	Alkaline.
Melting point /range	Not applicable.
Boiling point/range	401 °F (205 °C)
Flash Point	205 °F (96 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Vapor pressure	<1.00 mmHg at 70 °F (21 °C)
Relative vapor density	Not determined.
Relative density	0.96 @ 25°C (water = 1)
Water solubility	Appreciable.
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight	No data available

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions.
Conditions to avoid	Short term exposures to temperatures above 300°C. Potentially violent decomposition can occur above 350°C. Generation of gas during decomposition can cause pressure in closed systems.
Materials to avoid	Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.

Hazardous decomposition products	Nitric acid. Ammonia Nitrogen oxides (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO2). Aldehydes Flammable hydrocarbon fragments
Possibility of hazardous Reactions/Reactivity	No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

Likely routes of exposure

Effects on eye	Causes eye irritation.
Effects on skin	Causes skin irritation.
Inhalation effects	Harmful if inhaled and may cause delayed lung injury. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.
Ingestion effects	No data available.
Symptoms	Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat. Eye disease., Skin disorders and Allergies., Asthma.

Acute toxicity

Acute oral toxicity	LD50 : 15,000 mg/kg Species : Rat.
Inhalation	LC50 (4h) : Species : Rat : not been determined.
Acute dermal toxicity	LD50 : 23,000 mg/kg Species : Rabbit.
Skin corrosion/irritation	Corrosive to the skin of a rabbit.
Serious eye damage/eye irritation	Severe eye irritation.
Sensitization	May cause sensitization by skin contact.

Chronic toxicity or effects from long-term exposure

Carcinogenicity	No data available.
Reproductive toxicity	No data available on the product itself.
Germ cell mutagenicity	No data available on the product itself.
Specific target organ systemic toxicity (single exposure)	No data available.
Specific target organ systemic toxicity (repeated exposure)	No data available.
Aspiration hazard	No data available.

Delayed and Immediate Effects and Chronic Effects from Short and Long Term Exposure

This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1percent or greater. Prolonged contact may result in chemical burns and permanent damage., Repeated or prolonged contact causes sensitization, asthma and eczemas. Eye disease., Skin disorders and Allergies.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects

Acute toxicity in fish	No data available on the product itself.
Toxicity to fish – Components Nonylphenol	LC50 (96 h) : 0.128 mg/l Species : Flathead minnow (Pimephales promelas).
Toxicity to daphnia – Components Nonylphenol	EC50 (48 h) : 0.19 mg/l Species : Daphnia
Toxicity to other organisms	No data available.
Toxicity to bacteria	IC50 (18h) : >42.6 mg/l Bacteria, Respiration rates.

Persistence and degradability

Biodegradability	No data is available on the product itself.
Mobility	No data available.
Bioaccumulation	No data is available on the product itself.
Bioaccumulation – Components Nonylphenol	Moderate bioaccumulation potential.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste from residues/unused products	Contact supplier if guidance is required.
Contaminated packaging	Dispose of container and unused contents in accordance with federal, state, and local requirements.

SECTION 14: TRANSPORT INFORMATION

DOT

UN/ID number	UN2735
Proper shipping name	Polyamines,liquid,corrosive,N.O.S. (polypropylenediamine, Nonylphenol)
Class or division	8
Packing group	III
Label(s)	8
Marine pollutant	Yes

IATA

UN/ID number	UN2735
Proper shipping name	Polyamines,liquid,corrosive,N.O.S. (Polypropylenediamine,Nonylphenol)
Class or division	8
Packing group	III
Label(s)	8
Marine pollutant	Yes

IMDG

UN/ID number	UN2735
Proper shipping name	Polyamines,liquid,corrosive,N.O.S. (Polypropylenediamine, Nonylphenol)

Class or division	8
Packing group	III
Label(s)	8
Marine pollutant	Yes

TDG

UN/ID number	UN2735
Proper shipping name	Polyamines,liquid,corrosive,N.O.S. (Polypropylenediamine,Nonylphenol)
Class or division	8
Packing group	III
Label(s)	8
Marine pollutant	Yes

Further Information

The transportation information is not intended to convey all specific regulatory data relating to this material. For complete transportation information, contact Res-Tek, Inc.

SECTION 15: REGULATORY INFORMATION

Toxic Substance Control Act (TSCA) 12(b) Component(s): Nonylphenol.

Country	Regulatory list	Notification
USA	TSCA	Included on Inventory.
EU	EINECS	Included on EINECS inventory or polymer substance, monomers included on EINECS inventory or no longer polymer.
Canada	DSL	Included on Inventory.
Australia	AICS	Included on Inventory.
Japan	ENCS	Included on Inventory.
South Korea	ECL	Included on Inventory.
China	SEPA	Included on Inventory.
Philippines	PICCS	Included on Inventory.

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification Acute Health Hazard

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above 'de minimus' level None.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)
This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

SECTION 16: OTHER INFORMATION

Hazard Rating System HMIS	Health: 3 Flammability: 1 Physical hazard: 0
Information source and references	This SDS is prepared by Res-Tek from information supplied by internal references within our company.

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