



SAFETY DATA SHEET

Issuing Date: 23-Jan-2019

Version 1

PYROSTAR™ ES-F Limulus Amebocyte Lysate

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	PYROSTAR™ ES-F Limulus Amebocyte Lysate
Product Code(s)	WPEK4-20015, WPEK4-20003, WPEK4-20006, WPEK4-20125, WPEK4-20025, WPEK4-50015, WPEK4-50003, WPEK4-50006, WPEK4-50125, WPEK4-50025, WPEM-20015, WPEM-20003, WPEM-20006, WPEM-20125, WPEM-20025, WPEM-50015, WPEM-50003, WPEM-50006, WPEM-50125, WPEM-50025, WPESK-0015, WPEPK4-20015
Product Use	Reagent.
Manufactured by	FUJIFILM Wako Chemicals U.S.A. Corporation 1600 Bellwood Road Richmond, VA 23237
SDSs are available at the following website(s):	Not available
Company Phone Number	U.S.A: 804-271-7677
Emergency Telephone	Transport-CHEMTREC Inside NA: 800-424-9300 Transport-CHEMTREC Outside NA: 703-527-3887 Transport-CANUTEC Inside Canada: 613-996-6666 Medical Emergency (24 hour): 877-935-7387
E-mail	EHS@fujifilm.com

2. HAZARDS IDENTIFICATION

Classification

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

GHS Label elements, including precautionary statements

Not classified

Precautionary Statements

Prevention

Not applicable

Response

Not applicable

Storage

Not applicable

Disposal

Not applicable

Hazards not otherwise classified (HNOC)

Not classified

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice

Immediate medical attention is not required.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact

Wash off immediately with plenty of water. Get medical attention if irritation develops and persists.

Inhalation

Move to fresh air. If symptoms persist, call a physician.

Ingestion

If swallowed, do not induce vomiting - seek medical advice.

Most important symptoms/effects, acute and delayed

None known.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

None known.

Specific hazards arising from the chemical

None known.

Hazardous Combustion Products

Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides. Hydrogen chloride. Amines. Sodium oxides. Magnesium oxides.

Explosion Data

Sensitivity to Mechanical Impact none

Sensitivity to Static Discharge none

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid contact with the skin and the eyes.

Environmental precautions

Prevent product from entering drains.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Avoid dust formation.

Methods for cleaning up Use personal protective equipment. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE**Precautions for safe handling**

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Do not breathe vapors/dust. Ensure adequate ventilation. Avoid dust formation in confined areas.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep at temperatures below 2 °C / 35.6 °F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Exposure controls

Engineering Measures Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and body protection Wear protective gloves/clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white	Odor	Odorless
Odor Threshold	Not available	Physical State @20°C	powder
pH	7.1 - 7.6	Molecular Weight	Not available
Specific Gravity	Not available	Autoignition temperature	Not available
Flash point	Not available	Boiling point / boiling range	Not available
Decomposition temperature	Not available	Freezing Point	Not available
Melting point / melting range	Not available		
Flammability Limit in Air	Not available		
Oxidizing Properties	Not available	Explosive Properties	Not available
Solubility	Soluble in water	Partition coefficient	Not available
Evaporation rate	Not available	Vapor Pressure	Not available
Vapor density	Not available	Density	Not available
VOC (lb/gal)	Not available	VOC (g/l)	Not available
Dynamic viscosity	Not available		

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

This material as supplied must be carefully evaluated as a combustible dust hazard. Avoid all dusty conditions such as sweeping or careless handling of this material. This material should not be allowed to accumulate on piping, equipment, floors, ceiling components or surfaces of any kind. Combustible dust can be susceptible to human static discharge as an ignition source if proper dispersion and concentration are present. Use only approved methods to gather or clean this material.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information****Acute toxicity****Inhalation**

Inhalation of dust in high concentration may cause irritation of respiratory system.

Eyes

Dust contact with the eyes can lead to mechanical irritation.

Skin

Contact with dust can cause mechanical irritation or drying of the skin.

Ingestion

Ingestion may cause stomach discomfort.

Component Information

No information available

Information on toxicological effects

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Irritation**

Non-irritating during normal use.

Corrosivity

No information available.

Sensitization

No information available.

Mutagenic Effects

No information available.

Reproductive Toxicity

No information available.

Carcinogenicity

None known.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Target Organ Effects

Skin, Eyes, Respiratory system.

Aspiration hazard

No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)

6138 mg/kg

ATEmix (dermal)

28490 mg/kg mg/l

ATE: Acute toxicity estimate

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated.

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG Not regulated

ADR/RID Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	No
DSL/NDL	No
PICCS	No
EINECS/ELINCS	No
ENCS	No
IECSC	No
KECL	No
AICS	No

***Yes - All component(s) of this product are included or are exempt from listing on the inventory.**

***No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

TSCA Sections 4, 5 and 12(b)

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Classification is shown in section 2 of this SDS

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

International Regulations

Canada - NDSL

This product does not contain any NDSL chemicals.

Mexico - Grade

No information available

Mexico - Carcinogen Status and Exposure Limits

No information available

Other Regulations

No information available

16. OTHER INFORMATION

NFPA	Health Hazard 1	Flammability 0	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 1	Flammability 0	Physical Hazard 0	Personal protection B

Prepared By FUJIFILM Environment, Health and Safety, phone: 800-473-3854

Revision Date 23-Jan-2019

Revision Note No information available

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

end