FUJIFILM

SAFETY DATA SHEET

Version 1

Issuing Date: 17-Dec-2018

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier 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 Name** PYROSTAR™ ES-F Limulus Amebocyte Lysate 1.2. Relevant identified uses of the substance or mixture and uses advised against **Product Use** Reagent. No information available. Uses advised against 1.3. Details of the supplier of the safety data sheet Supplier FUJIFILM Europe GmbH Heesenstraße 31 40549 Düsseldorf, Germany Manufactured by FUJIFILM Wako Chemicals U.S.A. Corporation 1600 Bellwood Road Richmond, VA 23237 For further information, please contact: **Company Phone Number** U.S.A: +804-271-7677 E-mail Address EHS@fujifilm.com

1.4. Emergency telephone number

CHEMTREC UK: +(44)-870-8200418

Europe

+49 (0)211 5089 137 (9:00 a.m. to 6 p.m.)

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.3. Other hazards

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

No dangerous ingredients according to Regulation (EC) No. 1907/2006

Full text of H- and EUH-phrases: see section 16

4. FIRST AID MEASURES

4.1. Description of first aid measures

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 soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Ingestion	If swallowed, do not induce vomiting - seek medical advice.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Inhalation	Move to fresh air. If symptoms persist, call a physician.

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

No information available.

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

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

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

Unsuitable Extinguishing Media

No information available.

5.2. Special hazards arising from the substance or mixture

None known.

Hazardous Combustion Products

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

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

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

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.

6.4. Reference to other sections

See section 7 for more information. See section 8 for more information. See Section 12 for additional Ecological Information. See section 13 for more information.

7. HANDLING AND STORAGE

7.1. 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.

7.2. 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.

7.3. Specific end use(s)

Reagent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit valueThis product does not contain any hazardous materials with occupational exposure limits
established by the region specific regulatory bodies.Derived No Effect Level (DNEL)No information available.Predicted No Effect Concentration
(PNEC)No information available.8.2. Exposure controls
Engineering MeasuresEnsure adequate ventilation, especially in confined areas.Personal protective equipmentEnsure adequate ventilation, especially in confined areas.

Eye Protection	Tight sealing safety goggles.
Hand Protection	Wear protective gloves.
Skin and body protection	Long sleeved clothing.
Respiratory protection	Ensure adequate ventilation.
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.

Environmental Exposure Controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Odor Threshold pH	white No information available 7.1 - 7.6	Odor Physical State @20°C	Odorless powder
Boiling point / boiling range Autoignition temperature Melting point / melting range Flammability (solid, gas)	No information available No information available No information available No information available	Flash point Decomposition temperature Freezing Point Flammability Limit in Air	No information available No information available No information available No information available
Oxidizing Properties Specific Gravity Evaporation rate Vapor density Dynamic viscosity	No information available No information available No information available No information available	Explosive Properties Solubility Vapor Pressure Density Partition coefficient: n-octanol/water	No information available Soluble in water No information available No information available No information available

Other information Molecular Weight

No information available

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4. 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.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

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 gastrointestinal irritation, nausea, vomiting and diarrhea. Component Information No information available Chronic toxicity Carcinogenicity None known. None known. Corrosivity Sensitization None known. **Reproductive Toxicity** None known. **Mutagenic Effects** None known. **Target Organ Effects** Skin. Eyes. Respiratory system.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

The environmental impact of this product has not been fully investigated

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with federal, state and local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

IMDG	Not regulated
RID	Not regulated
ADR/RID	Not regulated
ICAO	Not regulated
IATA	Not regulated

Special precautions for users

No information available.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture_

International Inventories

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

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical safety assessment

No information available.

16. OTHER INFORMATION

Prepared By

FUJIFILM Environment, Health and Safety, phone: (01) (800) 473-3854

Revision Date	17-Dec-2018
Revision Note	CLP Annex VI harmonized classification(s) and/or available REACH registration information are the primary data sources referenced in determining the classification of this product.

This safety data sheet complies with the requirements of: Regulation (EC) No 1272/2008.

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.