SAFETY DATA SHEET

Section 1: Identification

Product Name: PiperION-A

Chemical Name/Synonyms: poly[(p-terphenyl-4,4'-diyl)(N,N-dimethyl-piperidinium-bicarbonate-4,4-

diyl)-co-(p-terphenyl-4,4'-diyl)(2,2,2-trifluoro-1-phenylethylidene-diyl)]; PAP-TP-85-HCO3

Company: DISI: W7energy LLC

In emergency call 911.

For information about this SDS, use this department contact phone#: 3022008619

Section 2: Hazard(s) Identification

See https://www.sigmaaldrich.com/safety-center/globally-harmonized.html for a list of hazard classifications, signal words, hazard statements, pictograms, precautionary statements, and a description of hazards.

Hazard Classification: Signal Word(s): Warning

Hazard Statements: May form combustible dust concentrations in air

Pictograms: none

Precautionary Statements: none **Description of other hazards:** none

Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS#	Conc.
poly[(p-terphenyl-4,4'-diyl)(N,N-dimethyl-piperidinium-bicarbonate-4,4-diyl)-co-(p-terphenyl-4,4'-diyl)(2,2,2-trifluoro-1-phenylethylidene-diyl)]	4-Piperidinone, 1-methyl-, polymer with 1,1':4',1"- terphenyl and 2,2,2-trifluoro-1-phenylethanone, compd. with N-methyl, carbonates; PAP-TP-85-HCO3	2304456-81-1	100%

Section 4: First-Aid Measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5: Fire-Fighting Measures

Suitable extinguishing agents: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. **Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: Exposure Controls/Personal Protection

General protective and hygienic measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Breathing equipment: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Protection of hands: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Section 9: Physical and Chemical Properties

Form: Solid

Color: Colorless or light yellow

Odor: none

Odor threshold: No data available

pH: 7-8

Melting point/melting range: No data available Boiling point/boiling range: No data available

Flash point: No data available Evaporation rate: No data available Flammability: No data available

Upper/lower flammability or explosive limits: No data available

Auto ignition temperature: No data available Danger of explosion: No data available Vapor pressure: No data available Vapor density: No data available

Relative density: No data available

Solubility in/Miscibility with water: No data available

Section 10: Stability and Reactivity

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Conditions to avoid: Heat

Incompatible materials: Amines, Strong reducing agents, Strong oxidizing agents, Bases

Hazardous decomposition products: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides Other decomposition products - No data available. In the event of fire: see

section 5

Section 11: Toxicological Information

Acute toxicity: No data available

Potential routes of exposure/potential health effects

Skin: No data availableEye: No data availableInhalation: No data availableIngestion: No data available

<u>Carcinogenic effects:</u> No data available <u>Mutagenic effects:</u> No data available **Reproductive toxicity:** No data available

<u>Sensitization:</u> No data available <u>Target organs:</u> No data available

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: Mobility:

Biodegradation: Bioaccumulation:

Section 13: Disposal Considerations (non-mandatory)

Section 14: Transport Information (non-mandatory)

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15: Regulatory Information (non-mandatory)

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

No components are subject to the Pennsylvania Right To Know Act.

New Jersey Right To Know Components

No components are subject to the New Jersey Right To Know Act.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

SDS date of preparation/update: 9/15/2020