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SAFETY DATA SHEET

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product Name : MILLSTAB™ P

CAS Number : Mixture

Product Description : Aromatic Polycarbodiimide

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Use(s) : Antihydrolysis Agent

Restrictions on Use(s) : None known

1.3 Supplier : TSE Industries, Inc.

5260 113th Avenue North Clearwater, FL 33760 Tel: (727) 573-7676 Fax: (727) 572-0415

SDS Contact : <u>SDSinquiry@TSE-Industries.com</u>

Hours of Operation : Monday-Friday, 8:00 am-5:00 pm EST

1.4 Emergency Telephone : INFOTRAC®

North America: +1-800-535-5053

SECTION 2: Hazards Identification

2.1 Classification of the Substance or Mixture

Product Definition : Mixture

Physical Hazards : Not Classified as physical hazard according to 2012 OSHA Hazard Communication

Standard: 29 CFR1910.1200.

Health Hazards: Not Classified as physical hazard according to 2012 OSHA Hazard Communication

Standard: 29 CFR1910.1200.

This mixture has not been tested as a whole and classification is based on the toxicity of individual components. Acute toxicity of

100% of this mixture is not available.

2.2 Label Elements : None needed based on classification criteria

2.3 Hazard Not Otherwise Classified

Asphyxiate : None Combustible Dust : None

SECTION 3: Composition/Information on Ingredients

Substance/Mixture : Mixture

PRODUCT/INGREDIENT NAME	CAS#	%
Aromatic Polycarbodiimide	Confidnetial	95-100
Silane, dichlorodimethyl-reaction products with silica	68611-44-9	3-5

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact : Immediately flush eyes with plenty of water for at least 15 min., occasionally lifting the

upper and lower eyelids. Check for and remove any contact lenses. Get medical attention

if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Administer oxygen or artificial respiration as needed. Get medical attention immediately if irritation symptoms occur. IN case of inhalation of decomposition products during fire, symptoms may be delayed. The exposed person may need to be kept under medical

surveillance for 48 hours.

Skin Contact : Remove contaminated clothing and shoes. Flush contaminated skin with plenty of soap

and water for at least 15 minutes. Wash clothing before reuse. Get medical attention if

symptoms occur.

Ingestion : Do not induce vomiting unless directed to do so by medical personnel. Wash out mouth

with water. Remove victim to fresh air and keep at rest in a position comfortable for

breathing. Get medical attention if symptoms occur.

Protection of First-Aiders: No action shall be taken involving any personal risk or without suitable training.

4.2 Most Important Symptoms of Exposure

Acute : No known significant adverse effects.

Delayed : No known significant adverse effects.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to Physician : Treat symptomatically.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media: Dry chemical,CO₂, foam.

Unsuitable Extinguishing

Media

None known.

5.2 Special Hazards Arising from the Substance or Mixture

Hazards from the Substance

or Mixture

Fine dust clouds may form explosive mixture with air.

Hazardous Thermal Decomposition Products

Carbon dioxide, carbon monoxide, nitrogen oxides, isocyanate vapor and traces of

hydrogen cyanide may be released.

5.3 Advice for Firefighters

Special Protective Actions for

Firefighters

Move container(s) from fire area if it can be done without risk. Cool material with water spray until well after the fire is out. Do not scatter spilled material with high-pressure water

streams.

Special Protective Equipment

for Firefighters

Fire-fighters should wear NFPA compliant firefighting protective equipment and self-

contained breathing apparatus (SCBA).

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Emergency Response

Personnel

Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through split material. Put on appropriate personal protective equipment as specified in Section 8 of this SDS. Remove ignition sources.

6.2 Environmental Precautions : Avoid dispersal of spilt material and contact with soil, waterways, drains and sewers.

Inform the relevant authorities if the product has caused environmental pollution.

6.3 Methods and Materials for Containment and Cleaning Up

Small Spill : Move containers from spill area. Vacuum or sweep up material and place it in an

approved labeled container. Seal the container and dispose according to instructions in

section 13 of this SDS.

Large Spill : Not anticipated.

SECTION 7: Handling and Storage

7.1 Handling

Protective Measures : Wear appropriate personal protective equipment, as specified in section 8 of this SDS,

while handling this material.

Handling : Use only in well-ventilated areas. Avoid contact with eyes. Avoid generation and breathing

of dust. Do not eat, drink or smoke while handling this material. Clean any spills

immediately and decontaminate surface according to procedure in section 6.

7.2 Storage : Store in accordance with local regulations. Store in original container in a dry, cool and

well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Do not store in

unlabeled containers.

SECTION 8: Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Occupational Exposure Limits have not been established for this material.

Recommended Monitoring: Not applicable.

8.2 Exposure Controls

Engineering Controls : No special ventilation requirements. Good general ventilation should be sufficient to control

worker exposure to airborne contaminants.

Environmental Controls : Emissions from ventilation or work process equipment should be checked to ensure they

comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary

to reduce emissions to acceptable levels.

Individual Protection Measures

Hygiene Measures : Remove contaminated clothing. Wash hands, forearms and face thoroughly after handling

chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. Ensure that eyewash

stations and safety showers are close to the workstation location

Eye/Face Protection: Eye protection complying with OSHA 1910.133 standard.

Hand Protection: Chemical-resistant, impervious gloves complying with OSHA 1910.138 standard should be

worn at all times when handling chemical products. Recommended gloves: Nitrile rubber

Body Protection: Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before handling this product. Use permeation resistant clothing when spray mist/vapors are anticipated.

Foot Protection : Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Foot protection should comply with OSHA

1910.136 standard.

Respiratory Protection : Use air-purifying respirator or supplied air respirator complying with OSHA 1910.134

standard if vapors form. Recommended air-purifying respirator cartridge is an organic

vapor with particulate filter (Combination OV/P100) cartridge.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

<u>Appearance</u>

Physical State : Solid powder

Color : Yellow to brown

Odor : Faint

Odor Threshold : No data available pH : No data available

Melting Point/Freezing

Point

60-90°C (140-194°F)

Initial Boiling Point &

No data available

Boiling Range

Flash Point Open cup:310°C(590°F) [DIN ISO 2592]

Evaporation Rate No data available **Flammability** No data available Upper/Lower Flammability No data available

or Explosive Limits

Vapor Pressure No data available No data available **Vapor Density**

1.05 mg/cm³ @ 21°C(70°F) **Relative Density** Slightly soluble in cold water Solubility(ies)

Partition Coefficient:

n-octano/water

No data available

Ignition Temperature 455°C (851°F) **Auto-ignition Temperature** No data available Decomposition >120°C(248°F)

Temperature

9.2 Other Information None

SECTION 10: Stability and Reactivity

10.1 Reactivity No specific test data related to reactivity available for this product or ingredients.

10.2 Chemical Stability Stable at room temperature in closed containers under normal storage and handling

conditions (70°F and 14.7psig).

10.3 Possibility of Hazardous

Polymerization

Under normal conditions of storage and use (70°F and 14.7psig), hazardous reactions will

not occur. Will not polymerize. May form explosive dust/air mixtures.

10.4 Conditions to Avoid Avoid heat, sparks and open flames.

10.5 Incompatible Materials No data available.

10.6 Hazardous Decomposition

Products

Carbon dioxide, carbon monoxide, nitrogen oxides, isocyanate vapor and traces of

hydrogen cyanide may be released.

SECTION 11: Toxicological Information

Information on toxicological effects of material is not available at this time. Individual component information and calculations method have been used to evaluate health and physical hazards of the mixture.

Toxicity Data for Aromatic Polycarbodiimide

Acute Toxicity Oral LD 50: >5000 mg/kg (rat)

> Dermal LD 50: No data available Inhalation LC₅₀: No data available

Sensitization Not available. **Skin Irritation** Not available. **Eye Irritation** Not available. **Repeated Dose Toxicity** Not available. Not available. Mutagenicity Carcinogenicity Not available. **Reproductive Toxicity** Not available. Not available. **Teratogenicity Specific Target Organ** Not available. **Toxicity (single exposure)**

Specific Target Organ

Toxicity (repeated exposure)

Not available.

Aspiration Hazard

: Not available.

Information on the Likely Routes of Exposure

Dermal contact. Eye contact, Inhalation. Ingestion

Potential Acute Health Effects

Eye Contact
 Inhalation
 No known significant effects or critical hazards.
 Skin Contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

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

Short Term Exposure

Potential Immediate Effects : Not available.

Potential Delayed Effects : Individuals with permanent lungs sensitivity caused by isocyanate exposure can

experience symptoms which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack. These symptoms can be triggered by exposure to dust, cold air,

or other irritants and can last for weeks and in in severe cases for years.

Long Term Exposure

Potential Immediate Effects : Not available.

Potential Delayed Effects : Not available.

Potential Chronic Health Effects

General: No known significant effects or critical hazards.Carcinogenicity: No known significant effects or critical hazards.Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.Developmental Effects: No known significant effects or critical hazards.Fertility Effects: No known significant effects or critical hazards.

Other Information : None

SECTION 12: Ecological Information

12.1 Ecotoxicity : No data available.

12.2 Persistence and Degradability No data available.

12.3 Bioaccumulative Potential : No data available.

12.4 Mobility in Soil
Soil/Water Partition

No data available. No data available.

Coefficient (K_{oc})

Mobility : No data available.

12.5 Other Adverse Effects : No data available.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

Methods of Disposal : Dispose product via a licensed waste disposal contractor in accordance with existing

federal, state and local environmental laws. Incineration is the preferred method.

Empty Container Disposal : Empty container contains product residue. Do not reuse. If container is to be disposed,

ensure all product residue is removed prior to disposal.

Special Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and

sewers.

SECTION 14: Transport Information

Land Transport (DOT): Not regulated.Sea Transport (IMODG): Not regulated.Air Transport (ICAO/IATA): Not regulated.

Information

SECTION 15: Regulatory Information

U.S. EPA CERCLA Hazardous Substances (40CFR302.4)

<u>Components</u> <u>Reportable quantity</u>

None

U.S. EPA SARA TITLE III: Section

311/312 Categorizations

Additional Transportation

(40CFR370)

Not applicable

None

Not regulated.

U.S. EPA Emergency Planning and Community Right-to-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substances (40CFR 355,

Appendix A)

U.S. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65)-Supplier Notification Required This product does not contain a chemical which is listed in Section 313 at or above 'de

minimis' concentrations.

U.S. Toxic Substances Control

Act

All components of this material are in compliance with the current inventory requirements.

State Right-to-Know Information

The following chemical is specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Weight % Components CAS-No. State

California Proposition 65

To the best of our knowledge, this product does not contain chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: Other Information

Abbreviations and Acronyms

ATE : Acute Toxicity Estimate

DNEL : Derived No Effect Level

ACGIH : American Conference of Governmental Industrial Hygienists

CASRN : Chemical Abstracts Service Registry Number IARC : International Agency for Research on Cancer

N/A : Not Applicable
N/D : Not Determined

N/E : Not Established

NTP : National Toxicology Program

OSHA : Occupational Safety & Health Administration

PEL : Permissible Exposure Limit

PPE : Personal Protective Equipment

STEL : Short Term (15 min) Exposure Limit

STP : Standard Temperature and Pressure

TLV : Threshold Limit Value

TWA : Time Weighted Average (8 hr.) Time Weighted Average (8 hr.)

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