

**SECTION 1: Identification of the substance/mixture and of the company**

<b>Product Code:</b>	PowerStab™ 783
<b>CAS-No.:</b>	65447-77-0, 70624-18-9
<b>Manufacturer:</b>	Tintoll Performance Materials Co.,Ltd.
<b>Post Address:</b>	A703, No.50 Jialingjiang East St,Nanjing,China Email: SDS@TinToll.com
<b>Emergency Telephone Number:</b>	+86-25-8468-0091
<b>Use of Substance:</b>	For Industrial Use

**SECTION 2: Hazardous identification**

Signal word WARNING

**Potential environmental effects**

This product is toxic to aquatic organisms. Releases to the environment are to be avoided.

**SECTION 3: Composition/information on ingredients**

Chemical name	CAS Number	Content (Weight)
Butanedioic acid, dimethyl ester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol	65447-77-0	50.0 - 100.0 %
Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-striazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino] hexamethylene[(2,2,6,6-tetrame	70624-18-9	50.0 - 100.0 %

This material is classified as hazardous under OSHA regulations.

**SECTION 4: First aid measures****Inhalation:**

Remove to fresh air, if not breathing give artificial respiration. If breathing is difficult, give oxygen and get immediate medical attention.

**Skin:**

After contact with skin, wash immediately with plenty of water and soap.  
Get medical attention if irritation occurs.

**Eyes:**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Ingestion:**

Do not induce vomiting. If vomiting occurs naturally, have casualty lean forward to reduce the risk of

aspiration. Seek medical attention immediately.

**Notes to physician:**

May aggravate pre-existing skin conditions, allergies or eczema; liver disease and jaundice; or blood disorders.

**SECTION 5: Firefighting measures****Suitable extinguishing media:**

carbon dioxide, dry powder, foam, water fog

**Hazardous combustion products:**

Burning may produce toxic combustion products.

**Hazards during fire-fighting:**

Standard procedure for chemical fires.

The product can form an explosive dust/air mixture. For further information, see Section 7 Explosion Hazards.

**Protective equipment for fire-fighting:**

Wear self-contained breathing apparatus and chemical-protective clothing.

**SECTION 6: Accidental release measures****Cleanup:**

Sweep up and shovel into suitable containers for disposal.

Avoid raising dust.

Wear suitable protective equipment.

Should not be released into the environment.

**SECTION 7: Handling and storage****Handling****General advice:**

As with all industrial chemicals, use good industrial practices when handling. Avoid eye, skin, and clothing contact. Do not inhale. Do not taste or swallow. Use only with adequate ventilation.

**Protection against fire and explosion:**

Danger! Explosion Risk - Combustible powder. - Risk of explosion if an air-dust mixture forms. - Avoid creating dusty conditions. - Empty only into grounded containers. - If container is larger than 550 gallons (2m<sup>3</sup>) or if flammable solvents are present, the container must be inerted or the system otherwise designed to prevent or contain an explosion. Seek expert advice. In addition, for products packaged in fused-lined (coated) fiber drums, fiber drums with conductive liners, steel drums, steel pails, and Type C

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FIBC (bulk bags), the following instructions also apply: - Always ground this package before emptying. The user is responsible for designing the system to handle solid and ensuring proper training of employees in the system's use.

**Storage**

**General advice:**

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

### SECTION 8: Exposure Controls/Personal Protection

**Exposure Guidelines**

Butanedioic acid, dimethyl ester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol (9CI) (65447-77-0)	CIEL	8h TWA: 10 mg/m <sup>3</sup> (inhalable)
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**Engineering Controls:**

Work in well ventilated areas. Do not breathe dust.

**Personal protective equipment**

**Respiratory protection:**

Wear a NIOSH-certified respirator as necessary.

**Eye protection:**

Wear safety goggles (chemical goggles) if there is potential for airborne dust exposures.

**Body protection:**

Wear chemical resistant gloves and protective clothing.

**General safety and hygiene measures:**

There are no OSHA or ACGIH exposure guidelines available for component(s) in this product.

Eye wash station and safety shower should be available in immediate work area., Select additional protective equipment based upon potential for exposure.

### SECTION 9: Physical and Chemical Properties

**Information on basic physical and chemical properties**

Physical state	pastilles
Color	White to off-white
Odor	odourless
pH value	6.0 ( 20 - 25 °C) 1% Aqueous suspension (w:v)
Melting point	55 - 140 °C
Boiling point	no data available
Flash point	192 °C



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Evaporation rate	no data available
Flammability (solid, gas)	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Density	1.0 - 1.2 g/cm <sup>3</sup> ( 20 °C)
Water solubility	insoluble
Partition coefficient: n octanol/water	no data available
Auto-ignition temperature	360 °C (BAM)
Decomposition temperature	no data available

**Other safety information**

no data available

**SECTION 10: Stability And Reactivity****Stability:**

Stable.

**Conditions to avoid:** Avoid electro-static discharge. Avoid sources of ignition.**Substances to avoid:** Strong oxidizing agents, strong acids, strong bases.**Possibility of Hazardous Reactions:** No hazardous reactions known.**Hazardous decomposition products:** No decomposition expected under normal storage conditions.**SECTION 11: Toxicological Information****Acute oral toxicity:**

LD50 / oral / Chinese hamster: &gt; 1,500 mg/kg

Note: Data based on component information.

LD50 / oral / rat: &gt; 5,000 mg/kg

Note: Data based on component information.

**Acute inhalation toxicity:**

Information on: Butanedioic acid, dimethyl ester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol (9CI)

LC50 / by inhalation / rat: &gt; 1 ppm in air for a 4-hour aerosol exposure with approximately 40% of particles &lt;7 microns. There were no deaths or untoward behavioral alterations nor did necropsy reveal any gross pathologic alterations.

Information on:

Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino]hexamet

hylene[(2,2,6,6-tetrame

Exposure to the decomposition products produced by heating the product to 300 C elicited no mortalities with only transient symptoms noted.

**Acute dermal toxicity:**

LD50 / dermal / rat: > 2,000 mg/kg

Note: Data based on component information.

Skin irritation:

Information on:

Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]l[(2,2,6,6-tetramethyl-4-piperidyl)imino]hexamet  
hylene[(2,2,6,6-tetrame

(Rabbits) Not an irritant.

Information on: Butanedioic acid, dimethyl ester, polymer with  
-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol (9CI)

(Rabbits) Not an irritant.

**Eye irritation:**

Information on:

Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]l[(2,2,6,6-tetramethyl-4-piperidyl)imino]hexamet  
hylene[(2,2,6,6-tetrame

(Rabbits) Not an irritant.

Information on: Butanedioic acid, dimethyl ester, polymer with  
-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol (9CI)

(Rabbits) Not an irritant.

**Skin Sensitization:**

Information on: Butanedioic acid, dimethyl ester, polymer with  
-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol (9CI)

(Guinea Pig) Not a sensitizer.

Information on:

Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]l[(2,2,6,6-tetramethyl-4-piperidyl)imino]  
hexamethylene[(2,2,6,6-tetrame

(Guinea pig) Maximization test: Not a sensitizer.

**Subchronic Toxicity:**

Information on: Butanedioic acid, dimethyl ester, polymer with  
-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol (9CI)

3 Month study (rats): The organ weights were all within the normal variations and there was no evidence of any dose-related effect. The only macro- and histopathological findings was a mammary adeno-carcinoma in the right inguinal region of a female treated with 50 mg/kg bw. The tumor was not regarded as treatment related. The NOEL was 450 mg/kg.

**Subchronic Toxicity:**

Information on:

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Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino] hexamethylene[(2,2,6,6-tetrame

Feeding studies were conducted using the rat or dog for periods up to 6 months at dietary levels up to 10,000 ppm. Toxicity primarily involving the liver and mesenteric lymph node were evident in both species at the higher dosages. Spleen and blood changes were also seen. The rat NOEL was in the 5 -7 mg/kg/day range (100 ppm) with the dog NOEL being 19mg/kg/day (600 ppm).

**Genetic toxicity:**

Non-mutagenic (based on composition).

Information on:

Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino] hexamethylene[(2,2,6,6-tetrame

**Carcinogenicity:**

None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Information on: Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino] hexamethylene[(2,2,6,6-tetrame

**Reproductive toxicity:**

Information on:

Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino] hexamethylene[(2,2,6,6-tetrame

In a teratology study, pregnant rats were administered the product by gavage, from day 6 until day 15 of pregnancy, inclusive, at dosage of 0, 200, 600, and 1200 mg/kg. The dams of the higher dosage groups showed a dose-related reduction in body weight gain and food consumption. The progeny of the high-dose group displayed a delay of skeletal maturation, with calcanei and 5th sternbrae being affected. No other significant effects were seen. In a 2-generation reproduction study, rats were administered 400, 2000 and 4000 ppm in diet. No treatment-related effects were observed in the offspring at any dose level. However, toxic effects were observed at the 2000 and 4000 ppm dose levels in the parents of both generations; suggestive of an immunoresponse (effects included reddened and/or swollen ears and/or extremities, enlarged lymph nodes, and/or findings in the kidneys, spleen and/or liver). The no observable effect level (NOEL) for effects on the offspring was 4000 ppm; the NOEL for maternal and paternal toxicity was 400 ppm.

**Developmental toxicity/teratogenicity:**

Information on: Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino] hexamethylene[(2,2,6,6-tetrame (Rats) Teratology Study. Oral dosage of 0, 200, 600, and 1200 mg/kg from day 6 until day 15 of pregnancy.

The dams of the higher dosage groups showed a dose-related reduction in body weight gain and food consumption. The progeny of the high-dose group displayed a delay of skeletal maturation, with calcanei and 5th sternbrae being affected. No other significant effects were seen.

(Rats) In a 2-generation reproduction study, rats were administered 400, 2000 and 4000 ppm in diet. No

treatment related effects were observed in the offspring at any dose level. However, toxic effects were observed at the 2000 and 4000 ppm dose levels in the parents of both generations, suggestive of an immuno-response (effects included reddened and/or swollen ears and/or extremities, enlarged lymph nodes, and/or findings in the kidneys, spleen and/or liver). The no observable effect level (NOEL) for effects on the offspring was 4000 ppm; the NOEL for maternal and paternal toxicity was 400 ppm.

**Metabolism:**

Information on:

Poly[[6-[1,1,3,3-tetramethylbutyl)amino]-s-triazine-2,4-diy]][(2,2,6,6-tetramethyl-4-piperidyl)imino] hexamethylene [(2,2,6,6-tetrame Male rats were orally administered a single dose of either 15 or 200 mg/kg of radiolabelled test material.

Blood/plasma levels showed non-linearity at these doses and had a long elimination half-life. Distribution was primarily to spleen, liver and gastrointestinal tract. Polar metabolites were formed. Excretion was almost exclusively via the feces with about 70% and 100% of the radioactivity recovered by 24 and 168 hours, respectively.

**Metabolism:**

Information on: Butanedioic acid, dimethyl ester, polymer with 4-hydroxy-2, 2, 6,

6-tetramethyl-1-piperidineethanol (9CI) (rat) an average of 58% was excreted within 24 hours. After 144 hours, almost all radioactivity was excreted.

Residual radioactivity was found in the liver, testes, and ovaries. There is evidence that this product is first partially degraded in the intestinal tract. Thereafter, these degradation products are absorbed and further degraded.

**SECTION 12: Ecological Effects****Toxicity to fish:**

No data available

**Toxicity to aquatic invertebrates:**

No data available

**Toxicity to aquatic plants:**

No data available

**Toxicity to microorganisms:**

No data available

**Biodegradation:**

No data available

**SECTION 13: Disposal considerations****Waste disposal of substance:**

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Dispose of in accordance with national, state and local regulations.

**Resource Conservation and Recovery Act (RCRA):** Not a hazardous waste under RCRA (40 CFR 261).

### SECTION 14: Transport Information

**UN number**

ADR/RID: -                                      IMDG: -                                      IATA: -

**UN proper shipping name**

ADR/RID:    Not dangerous goods

IMDG:        Not dangerous goods

IATA:        Not dangerous goods

IATA        Not dangerous goods

**Transport hazard class(es)**

ADR/RID: -                                      IMDG: -                                      IATA: -

**Packaging group**

ADR/RID: -                                      IMDG: -                                      IATA: -

**Environmental hazards**

ADR/RID: -                                      IMDG: -                                      IATA: -

**Special precautions for user**

No data available

**Further information**

Not classified as dangerous in the meaning of transport regulations.

### SECTION 15: Regulatory Information

Canada: Domestic Substances List (DSL): All components either exempt or listed on the DSL

US: Toxic Substances Control Act (TSCA): All component(s) comprising this product are either exempt or listed on the TSCA inventory

**United States - Regulations**

**SARA Section 311/312 Hazard Communication Standard:**

Acute Health: Y Fire: N

Chronic Health: Y Reactivity: N

Sudden release of pressure: N

**SARA Reportable Quantities:**

No components listed.

**SARA Section 313 Toxic Chemical List:**

No components listed.





**OSHA hazard category:**

This material is classified as hazardous under OSHA regulations.

**Toxic Substances Control Act (TSCA) Significant New Use Rule (SNUR):**

This product is not subject to a Significant New Use Rule (SNUR).

**Toxic Substances Control Act (TSCA) Section 5(e) Consent Orders:**

This product is not subject to a Section 5(e) Consent Order.

**Toxic Substances Control Act (TSCA) Section 5(f):**

This product is not subject to a Section 5(f)/6(a) rule.

**Toxic Substances Control Act (TSCA) Section 12(b) Export Notification:**

No components listed.

**Clean Air Act - Hazardous Air Pollutants (HAP):**

This product does not contain any Hazardous Air Pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

**Clean Air Act 111 - Volatile Organic Compounds (VOC):**

This product does not contain any SOCOM Intermediate or Final Volatile Organic Compounds (VOC), as defined by the U.S. Clean Air Act Section 111 (40 CFR 60.489).

**Clean Air Act 602 - Ozone Depleting Substances (ODS):**

This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (ODS), as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B).

**Clean Water Act - Priority Pollutants (PP):**

This product does not contain any priority pollutants listed under the U.S. Clean Water Act Section 307(2)(1)

Priority Pollutant List (40 CFR 401.15).

**Pennsylvania Right to Know:**

This product does not contain any components that are subject to the Pennsylvania Right-To-Know disclosure requirement.

**California Proposition 65 - Chemicals Known to the State to Cause Cancer:**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**California Proposition 65 - Chemicals Known to the State to Cause Reproductive Toxicity:**

WARNING: This product contains a chemical known to the State of California to cause cancer.

**International Regulations****Chemical Weapons Convention:**

This product does not contain any component(s) listed under the Chemical Weapons Convention Schedule of Chemicals.

**SECTION 16: Other Information****Any other precaution**

The information herein is made based on references, information and data available at present. It maybe

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revised when new information is available.

The descriptions herein are for normal handling. For special application, make safety provisions suitable to them prior to use.