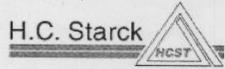
MATERIAL SAFETY DATA SHEET



A Bayer -- Company

H.C. STARCK INC. 45 Industrial Place Newton, MA 02161-1951

TRANSPORTATION EMERGENCY

CALL CHEMTREC: (800) 424-9300 INTERNATIONAL..... (703) 527-3887

NON-TRANSPORTATION

HCST EMERGENCY PHONE: (412) 923-1800 HCST INFORMATION PHONE: (617) 630-5800

Section 1: Product and Company Identification

Product Name:

Baytron® P VP CH 8000

Material Number: Product Code:

1016349 V4080

Chemical Family:

Aqueous mixture of a thiophene

Chemical Name:

Mixture of water and 3,4-polyethylenedioxythiophene-

polystyrenesulfonate (cationic)

Section 2: Composition/Information on Ingredients

HAZARDOUS INGREDIENTS

Ingredient Name/		Concentration	
CAS Number	Exposure Limits	Min.	Max.
3,4-polyethylenedioxythiophene- polystyrenesulfonate 155090-83-8	OSHA (PEL): Not Established ACGIH (TLV): Not Established	1%	5%

Section 3: Hazards Identification

EMERGENCY OVERVIEW

CAUTION! Color: Dark Blue Form: Liquid Odor: Nearly odorless May cause respiratory tract irritation. Irritating gases/fumes may be given off during burning or thermal decomposition.

POTENTIAL HEALTH EFFECTS

Route(s) of Entry:

Eye Contact, Skin Contact, Inhalation

Material Name: Baytron® P VP CH 8000 Product Code: V4080

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

General Effects of Exposure

Acute Effects of Exposure: Based on animal toxicity testing, this product is non-irritating to the

eyes and skin. (See Section 11) Inhalation ofvapor, spray or mist may cause irritation to the respiratory tract. Symptoms may include coughing, choking sensation, runny nose, sore throat, tightness in the

chest and labored breathing.

Chronic Effects of Exposure: No applicable information was found concerning any adverse

chronic effects from overexposure to this product.

Carcinogenic Components:

NTP: None

IARC: None

OSHA: None

Medical Conditions

Persons with preexisting eye or skin conditions or impaired pulmonary function may be more susceptible to the effects offihis

product.

Section 4: First Aid Measures

First Aid for Eye: In case of contact, flush eyes with plenty of lukemarm water. Get

medical attention if irritation develops or persists.

First Aid for Skin: Wash skin with soap and water. Get medical attention if irritation

develops or persists. Wash clothing and shoes before reuse.

First Aid for Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial

respiration. If breathing is difficult, give oxygen. Call a physician.

First Aid for Ingestion: Call a physician immediately.

Section 5: Fire Fighting Measures

Flash Point: > 212 °F (> 100 °C)

Flammable Limits:

Upper Explosion Limit Not Established

(UEL %):

Lower Explosion Limit Not Established

(LEL %):

Auto-ignition Temperature: > 932 °F (> 500 °C)

Extinguishing Media:

Suitable: Material is not combustible. Use extinguishing media suitable for

other combustible materials in the area.

Material Name: Baytron® P VP CH 8000

Product Code: V4080

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

Section 6: Accidental Release Measures

Spill or Leak Procedures:

Utilize recommended protective clothing and equipment. Absorb spill with inert material (e.g. dry sand or earth), then place in a suitable container. Spill area can be washed with water; Collect wash water for approved disposal.

Section 7: Handling and Storage

Storage Temperature:

Minimum: Maximum: 50 °F (10 °C) 122 °F (50 °C)

Shelf Life:

6 Months

Special Sensitivity:

None known.

Handling/Storage Precautions:

Avoid breathing vapor, spray or mist. Avoid contact with eyes. Store away from alkalis, acids, food and beverages. Handle as any moderately strong acid would be handled. Protect from freezing.

Section 8: Exposure Controls/Personal Protection

Personal Protection Equipment

Eye Protection Requirements:

Safety glasses or goggles.

Skin Protection Requirements:

Permeation resistant gloves and clothing are recommended to minimize skin contact., Employees should wash their hands and face

before eating, drinking or using tobacco products.

Ventilation Requirements:

Use local exhaust or other means to minimize worker exposure to

airborne vapors.

Respirator Requirements:

A NIOSH/MSHA approved respirator for organic vapors is recommended. Do not exceed the use limits of the respirator.

Additional Protective

Measures:

Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of this

product.

Section 9: Physical and Chemical Properties

Material Name: Baytron® P VP CH 8000

Product Code: V4080

Physical Form:

Liquid Dark Blue Nearly odorless

Color: Odor: pH:

Nearly odorless 1 - 2 @ 68 °F (20 °C)

Boiling Point: Melting/Freezing Point:

Approximately 212 °F (100 °C) Approximately 32 °F (0 °C)

Viscosity:

Not Established

Solubility in Water:

Miscible

Specific Gravity:

Approximately 1 @ 68 °F (20 °C)

Bulk Density:

Not Established

Vapor Pressure:

Approximately 23 mbar @ 68 °F (20 °C)

Section 10: Stability and Reactivity

Stability:

Under normal conditions of use and storage, the product is stable.

Hazardous Polymerization:

Will not occur

Substances to Avoid:

Avoid contact with acids and bases.

Conditions to Avoid:

None known.

Decomposition Temperature:

Not Established

Decomposition Products:

Thermal decomposition may produce carbon monoxide, carbon dioxide, organic sulfur compounds, and other potentially toxic

fumes.

Section 11: Toxicological Information

Toxicity Data for Baytron® P VP CH 8000

Toxicity Note:

No data available for this product.

Acute oral toxicity:

> 2,000 mg/kg (Rat) Tests performed on a similar product

Eye Toxicity:

Non-irritating (Rabbit) Tests performed on a similar product

Skin Toxicity:

Non-irritating (Rabbit) Tests performed on a similar product

Sensitization:

No indication of a sensitizing effect (Magnusson Kligman) Tests

performed on a similar product

Mutagenicity:

Ames test: negative Tests performed on a similar product

Toxicity Data for 3.4-polyethylenedioxythiophene-polystyrenesulfonate

Toxicity Note:

No data available for this component.

Section 12: Ecological Information

Ecological Data for Baytron® P VP CH 8000

Material Name: Baytron® P VP CH 8000

Product Code: V4080

Fish Toxicity:

> 10,000 mg/L Zebra fish (Brachydanio rerio) Tests performed on a

similar product

Inhibition Bacteria:

EC50: > 10,000 mg/L Activated sludge microorganisms Tests

performed on a similar product

Ecological Data for 3,4-polyethylenedioxythiophene-polystyrenesulfonate

Ecological Note:

No data available for this component.

Section 13: Disposal Considerations

Waste Disposal Method:

Waste disposal should be in accordance with existing federal, state

and local environmental control regulations.

Section 14: Transportation Information

Technical shipping name:

Thiophene Mixture

Freight Class

Bulk:

Chemicals, N.O.I. (NMFC 60000)

Package:

Chemicals, N.O.I. (NMFC 60000)

Product Label:

Product Label Established

Domestic Surface Transportation (DOT)

Hazard Class or Division:

Non-Regulated

Marine Transportation (IMO / IMDG)

Hazard Class Division

Non-Regulated

Number:

Air Transportation (ICAO / IATA)

Hazard Class Division

Non-Regulated

Number:

Radioactive?:

Non-Radioactive

Section 15: Regulatory Information

United States Federal Regulations

OSHA Hazcom Standard

Hazardous

Rating:

TSCA Inventory List:

On TSCA Inventory

CERCLA Hazardous Substance:

Component(s)

Reportable Quantity

Material Name: Baytron® P VP CH 8000

Product Code: V4080

None

SARA Title III

SARA Section 302 Extremely Hazardous Substances:

Component(s)/ CAS Number None

Concentration

SARA Section 311/312 Hazard Immediate Health Hazard

Categories:

SARA Section 313 Toxic Chemicals:

Component(s)/ CAS Number

Reporting Threshold Concentration

Max.

Min.

RCRA Status:

When discarded in its purchased form, this product meets the criteria of corrosivity, and should be managed as a hazardous waste (EPA Hazardous Waste Number D002). (40 CFR 261.20-24)

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

State Right-to-Know Information

Component(s)/		Concentration	
CAS Number	State Code	Min.	Max.
Water	PA-N, NJ-N	95%	
7732-18-5	77.000 F. M. C.	20.00	
3,4-polyethylenedioxythiophene- polystyrenesulfonate 155090-83-8	PA-N, NJ-N	1%	5%

State Code Translation Table

PA-N = Pennsylvania Non-hazardous

NJ-N = New Jersey Other - includes predominant ingredients

Section 16: Other Information

HMIS Rating

Health	1
Flammability	0
Reactivity	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

H.C. STARCK INC.'s method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by H.C. STARCK INC. as a customer service.

Contact:

Ann Watt

Phone:

(412) 777-7742

Material Name: Baytron® P VP CH 8000

Product Code: V4080

^{*=}Chronic Health Hazard

MSDS Number: R40144 Version Date: 03/29/2002 MSDS Version: 1.4 This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of H.C. STARCK INC.. The data on this sheet relates only to the specific material designated herein. H.C. STARCK INC. assumes no legal responsibility for use or reliance upon these data. Material Name: Baytron® P VP CH 8000 Product Code: V4080 7 of 7