

MATERIAL SAFETY DATA SHEET**MSDS# 2101****SECTION 1**

QUADRANT EPP
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READING, PA. 19612-4235

TELEPHONE NUMBERS:
PRODUCT INFORMATION (Quadrant EPP) -
610-320-6600
TRANSPORTATION EMERGENCY (CHEMTREC) -
800-424-9300

MATERIAL IDENTIFICATION

PRODUCT NAME: **QUADRANT® PPSU POLYPHENYLSULFONE, UNFILLED**

CHEMICAL NAME: **POLYPHENYLSULFONE - PPSU**

CAS NO.: **25608-64-4 (BASE POLYMER)**

PRODUCT USE: **ENGINEERING THERMOPLASTIC STOCK SHAPE FOR SUBSEQUENT FABRICATION.**

TSCA INVENTORY STATUS: **ALL REPORTABLE INGREDIENTS ARE LISTED IN THE TSCA CHEMICAL SUBSTANCE INVENTORY.**

SECTION 2**HAZARDOUS INGREDIENTS (ADDITIVES NOT HAZARDOUS BY 29 CFR 1910.1200)**

IDENTITY	CAS#	CONCENTRATION	EXPOSURE LIMITS
POLYPHENYLSULFONE	25608-64-4	--	No exposure limit established
Titanium dioxide	13463-67-7	0-2%	OSHA PEL: 10 mg/m³ (total dust) OSHA TOTAL DUST 10 mg/m³ (1898) OSHA Respirable Dust: 5 mg/m³ (1989) ACGIH TLV-TWA: 10 mg/m³ (total dust)
Carbon Black	13333-86-4	0-1%	OSHA PEL: 3.5 mg/m³ (1989) ACGIH TLV-TWA: 3.5 mg/m³ ACGIH TLV-STEL: 7 mg/m³

SECTION 3**HEALTH HAZARD DATA**

ACUTE OR IMMEDIATE EFFECTS: ROUTES OF ENTRY AND SYSTEMS.

INGESTION: **NOT A PROBABLE ROUTE OF EXPOSURE.**

SKIN: **MOLTEN POLYPHENYLSULFONE CAUSES THERMAL BURNS.**

EYE: **MECHANICAL IRRITATION ONLY.**

INHALATION: **SHAPES NOT RESPIRABLE.**

SECTION 4EMERGENCY FIRST AID

- **If exposed to fumes from overheating, move to fresh air. Consult a physician if symptoms persist.**
- **Wash skin with soap and plenty of water.**
- **Flush eyes with water. Consult a physician if symptoms persist.**
- **If molten polymer contacts skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical attention to thermal burn.**

CHRONIC EFFECTS: **NONE KNOWN.**

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY THIS MATERIAL: **NONE KNOWN.**

SECTION 5FIRE AND EXPLOSION HAZARD DATA

FLASH IGNITION TEMPERATURE: **non-flammable.** METHOD: --

UNUSUAL FIRE, EXPLOSION HAZARDS: **NONE KNOWN.**

HAZARDOUS COMBUSTION PRODUCTS: **INCOMPLETE BURNING CAN PRODUCE CARBON MONOXIDE, CARBON DIOXIDE, AND OTHER HARMFUL PRODUCTS.**

SPECIAL FIRE FIGHTING INSTRUCTIONS: **FIRE FIGHTERS AND OTHERS EXPOSED TO PRODUCTS OF COMBUSTION SHOULD WEAR FULL PROTECTIVE CLOTHING INCLUDING SELF-CONTAINED BREATHING APPARATUS. FIRE FIGHTING EQUIPMENT SHOULD BE THOROUGHLY DECONTAMINATED AFTER USE.**

EXTINGUISHING MEDIA: **WATER SPRAY OR ANY CLASS "A" EXTINGUISHING AGENT.**

>= Physical health Hazards:

DUST MAY FORM EXPLOSIVE MIXTURES WITH AIR. AVOID DUST FORMATION AND CONTROL IGNITION SOURCES. ALL PLASTIC DUST PARTICLES SUSPENDED IN AIR ARE COMBUSTIBLE AND MAY BE EXPLOSIVE. KEEP AWAY FROM HEAT, SPARKS, FLAME, AND OTHER IGNITION SOURCES. PREVENT DUST ACCUMULATIONS AND DUST CLOUDS. EMPLOY GROUNDING, VENTING, AND EXPLOSIVE RELIEF PROVISIONS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES AND NFPA PROVISIONS IN ANY PROCESS CAPABLE OF GENERATING DUST AND/OR STATIC ELECTRICITY. EXPLOSION HAZARDS APPLY ONLY TO DUSTS, NOT GRANULAR FORMS OF THIS PRODUCT. SEE ALSO SPECIAL PRECAUTIONS SECTION BELOW.

SECTION 6**ACCIDENTAL RELEASES**

SPILL OR RELEASE: CLEAN UP BY VACUUMING OR SWEEPING TO PREVENT FALLS.

SECTION 7**STORAGE CONDITIONS**

Dry storage.

SECTION 8**PROTECTION INFORMATION**

EYE: Safety glasses are recommended to prevent particulate matter from entering eyes while grinding or machining.

SKIN: Protective gloves are required when handling hot polymer. Also, long sleeve cotton shirt and long pants if handling molten polymer.

VENTILATION: Local exhaust at processing equipment to keep particulates below 15 mg/m³, the OSHA limit for nuisance dusts. Grinding and machining of parts should be reviewed to assure that particulate levels are kept at recommended levels.

RESPIRATOR: None under normal processing, if ventilation is adequate.

SECTION 9PHYSICAL/CHEMICAL DATA

APPEARANCE: **STOCK SHAPE MAY BE IN THE FORM OF PLATE OR ROD.**

ODOR: **ESSENTIALLY ODORLESS.**

SOFTENING POINT (glass transition): **220 C./ 428 F.**

SOLUBILITY IN WATER: **NEGLIGIBLE, BELOW 0.1%.**

VOLATILE CONTENT %: **<1%**

SPECIFIC GRAVITY: **1.29**

>= Precautions For Repair & Maintenance Of Contaminated Equipment: Eliminate ignition sources:

TRANSFER FROM STORAGE WITH A MINIMUM AMOUNT OF DUSTING. GROUND ALL TRANSFER, BLENDING, AND DUST COLLECTING EQUIPMENT TO PREVENT STATIC SPARKS IN ACCORDANCE WITH NFPA 70 "NATIONAL ELECTRIC CODE". REVIEW AND COMPLY WITH ALL RELEVANT NFPA PROVISIONS, INCLUDING BUT NOT LIMITED TO NFPA 484 AND NFPA 654 RELATED TO COMBUSTIBLE DUST HAZARDS. REMOVE ALL IGNITION SOURCES FROM MATERIAL HANDLING, TRANSFER, AND PROCESSING AREAS WHERE DUST MAY BE PRESENT. LOCAL EXHAUST VENTILATION SHOULD BE PROVIDED IN WORK AREA.

SECTION 10HAZARDOUS REACTIVITY

STABILITY: **AT ROOM TEMPERATURE: IN NORMAL CIRCUMSTANCES THE PLASTIC AND CHIPS ARE STABLE**

MATERIALS TO AVOID: **STRONG ACIDS AND OXIDIZING AGENTS.**

CONDITIONS TO AVOID: **GENERATING DUST, TEMPERATURES ABOVE THE GLASS TRANSITION TEMPERATURE OF 220°C / 428°F**

SECTION 11TOXICOLOGICAL INFORMATION

ACUTE TOXICITY DATA:

EYE IRRITATION: Testing not conducted. See Other Toxicity Data.

SKIN IRRITATION: Testing not conducted. See Other Toxicity Data.

DERMAL LD50: Testing not conducted. See Other Toxicity Data.

INHALATION LC50: Testing not conducted. See Other Toxicity Data.

OTHER TOXICITY DATA: Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and / or professional experience.

Dense dust generated by the handling and / or processing of this material may be irritating to the eyes, skin, nose, and throat.

Titanium dioxide has been assigned exposure limits by ACGIH and OSHA based on nuisance dust and not toxicity.

This product may contain carbon black. Carbon black has been shown to cause lung tumors in rats at high exposure concentrations. These concentrations exceed the capacity of the lung to clear the carbon black particles, thus resulting in significant toxicity. The International Agency for Research on Cancer (IARC) has evaluated carbon black and found it to be possibly carcinogenic to humans (Group 2B).

SECTION 12ECOLOGICAL INFORMATION

BP AMOCO HAS NOT CONDUCTED ECOLOGICAL TESTING ON THIS PRODUCT.

SECTION 13DISPOSAL

SPILL OR RELEASE: Clean up by vacuuming or wet sweeping to minimize dust exposure.

WASTE DISPOSAL: Recycling is encouraged, Landfill or incineration in compliance with Federal, State, and Local regulations.

SECTION 14TRANSPORT INFORMATION

DOT HAZARD CLASS: **NA**

SHIPPING NAME: **NA**

**SECTION 15A
REGULATORY INFORMATION**

CERCLA SECTIONS 102a / 103 HAZARDOUS SUBSTANCES (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product is

SARA TITLE III SECTIONS 311 / 312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): This product is defined as hazardous by OSHA under 29 CFR Part 1910.1200(d)

SARA TITLE III SECTION 313 (40 CFR Part 372): This product is not regulated under Section 313 of SARA and 40 CFR Part 372.

U.S. INVENTORY (TSCA): Listed on inventory.

OSHA HAZARD COMMUNICATION STANDARD: Contains a component listed by OSHA. Contains a component listed by ACGIH. Contains and IARC 2B carcinogen.

WHMIS Controlled Product Classification: Contains a component listed by WHMIS.

ED INVENTORY (EINECS / CLINCS): In compliance

JAPAN INVENTORY (MITI): Listed on inventory

AUSTRALIA INVENTORY (AICS): One or more components not listed on the inventory.

KOREA INVENTORY (ECL): Not listed on inventory.

CANADA INVENTORY (DSL): One or more of the components of this product is not listed on the DSL.

PHILIPPINE INVENTORY (PICCS): Not determined.

**SECTION 15B
LABELING INFORMATION**

Health	1
Flammability	1
Reactivity	0
PPE	A
#Acute <input type="checkbox"/> *Chronic	

SECTION 16MISCELLANEOUS INFORMATION

This product, to the best of our knowledge, does not contain and is not manufactured with and Class I, or Class II Ozone Depleting Chemicals (ODCs).

Issued by: Richard Frey, SHE Manager, NA

Issued: 30Jun2010

Supersedes: January 8, 2009

The information set forth herein has been gathered from standard reference materials and/or supplier test data and is, to the best knowledge and belief of Quadrant EPP, accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and it is not suggested or guaranteed that the hazard precautions or procedures mentioned are the only ones that exist. Quadrant EPP makes no warranties, expressed or implied, with respect to the use of such information or the use of the specific material identified herein in combination with any other material or process, and assumes no responsibility therefor.

NA = Not applicable

NE = Not established.

> = New or revised information in this section when ">" appears in the left margin.

END OF MSDS