

Robust Impact Analysis (focused on EHSS) of CMP Slurry Manufacturing

Required Info.

Start Process

Process Name(n)

Result Sheet

Help

All Equipment

All Process Time

State Output Emission

Help

< Start

Process Information

Process Step: Hydrothermal 1 < Enter Process Name

Input Materials

1.1 Precursor Materials (Click here add additional chemicals)

2 Choose from known precursors from drop down menu

3 Enter Amount of Precursor Used in this process ↓

	Chemical Name	Chemical Formula	Quantity (kg)	Final Chemical formula	Stoichiometric Ratio(Final:initial)	Maximum Obtainable Product (Kg)	Theoretical Amount of Product obtained is calculated based on Molar mass and ratios
Precursor Chemical 1:	Cerium(III) nitrate hexahydrate	#ERROR!		#ERROR!	#ERROR!		
Precursor Chemical 2:		#ERROR!		#ERROR!	#ERROR!		

1.2 Solvents

4 Choose Solvent

5 Enter Solvent

	Quantity (L or Kg)
Solvent 1:	
Solvent 2:	

1.3 Water

6 Choose Type

7 Enter Quantity

Required

Optional

Estimated

6 kg Cerium Carbonate + 3.3 kg Oxalic Acid.2H2O

Mixed for 5 min

Mixture

Calcined at 800°C for 2 hours

3 kg Yellowish-White Powder (Cerium Oxide)

Used 1000 g

In Slurry Preparation

Mixed with 80 g (40% mass) Aqueous Solution of Ammonium Polyacrylate + 5600 g Deionized Water

Mixture for Wet Milling

Stirred for 10 min, Wet-Milled for 30 min