

MATERIAL SAFETY DATA SHEET

COMPANY NAME: Xiamen Innovacera Advanced Materials Co. Ltd.	EMERGENCY TELEPHONE NO: +86 592 558 9709		
TRADE NAME: Technical Ceramic Ball	MSDS NUMBER: 02	DATE OF ISSUE: 30-Dec-2016	
CHEMICAL NAME: Zirconia	SYNONYMS:		
PREPARED BY: Emily Lin	REVISION:	REVISION DATE:	REVIEWED BY:

1. INGREDIENTS

MATERIAL	PERCENT	ACGIH (TLV)	OSHA (PEL)
Zirconium Oxide (ZRO2):	94.5%		
All Values are Time-Weighted Averages (TWA), T = Total Particulate Matter R = Respirable Fraction of Particulate Matter			

2. PHYSICAL DATA

APPEARANCE: WHITE	ODOR: No Odor.	MELTING POINT: 100 – 1500 C	SPECIFIC GRAVITY: 6.0 – 6.3
VAPOR DENSITY (AIR = 1): NA	% VOLATILE BY VOLUME: NA	BULK DENSITY: NotEst	BOILING POINT: NotEst
VAPOR PRESSURE: NA	% SOLUBILITY (H ₂ O): Not Soluble.	EVAPORATION RATE (BuOAC = 1): NA	OTHER: NA

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT & METHOD: Highly inert inorganic oxides and nitride. Not detected.
FLAMMABLE LIMITS
LEL: UEL:
EXTINGUISHING MEDIA: NA
SPECIAL FIRE-FIGHTING PROCEDURES: NA
UNUSUAL FIRE AND EXPLOSION HAZARDS: Non-flammable. No risk of fire or explosion hazard.

4. HEALTH HAZARD DATA

LD50 ORAL (INGESTION): NAIF	LD50 DERMAL (SKIN CONTACT) : No irritation.	LD50 (INHALATION): Non-inhalable with no odor or gas.
PRIMARY ROUTE OF EXPOSURE: Skin contact.		
EFFECTS OF OVEREXPOSURE: Do not cause irritation or pain due to skin contact even for long durations.		

5. EMERGENCY AND FIRST AID PROCEDURES

These are solid materials with no odor or gas and safe to handle. If particulate matter of these materials accidentally gets into eyes, flush the eyes continuously with running water and contact a doctor. Material not intended for ingestion. If skin or hair contact occurs, flush skin and hair with running water.



6. PHYSICAL HAZARDS

No physical hazard unless strongly hit by this material.

7. SPECIAL PROTECTION INFORMATION

VENTILATION:
Not required.

RESPIRATORY:
Wear inhalation masks before drilling or crushing these samples.

EYE PROTECTION:
Recommended to wear dust-proof goggles while crushing or drilling these samples.

PROTECTIVE GLOVES:
Wear rubber or PVC gloves while handling this material.

8. CHEMICAL REACTIVITY

CONDITIONS CAUSING INSTABILITY:
Chemically stable. Highly inert to common acids and alkalis.

INCOMPATIBILITY (MATERIALS TO AVOID):
NAIF.

HAZARDOUS DECOMPOSITION PRODUCTS:
No decomposition even until 1000 C.

SPECIAL SENSITIVITY:
NotEst.

9. STORAGE INFORMATION

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Store in a cool and dry place.

10. SPILL, LEAK, AND DISPOSAL INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:
Solid material. No risk of spill or leak.

EPA RCRA ID NUMBER:

WASTE DISPOSAL METHOD:
Disposal in a landfill recommended.

Not Est. = Not Established
NAIF = No Applicable Information Found
NA = Not Applicable

