



12946 S. Dairy Ashford Road, Suite #310. Sugar Land, Tx 77478

SAFETY DATA SHEET

CQ ISP (16/30 – 20/40 – 30/50 – 40/70) Proppant

1.- IDENTIFICATION

Product Identifier

Product Name: CQ ISP (16/30, 20/40, 30/50, 40/70)
Chemical Name: Aluminum Silicate Family
CAS Number: 66402-68-4

Recommended use of the chemical and restrictions on use

Application: Proppant use in hydraulic stimulation for oil and gas reservoir
Uses advised against: Do not use in dry grinding, dry milling or abrasive blasting applications

Details of the supplier of the safety data sheet

Supplier: CHANGQING PROPPANT CORPORATION
12946 S. Dairy Ashford Road, Suite #310, Sugar Land, TX 77478

Emergency telephone number

Emergency telephone: 1 (832) 532-7390

2.- HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Not Classified
Environmental Not Classified

Label Elements

Hazard statements Not Classified
Precautionary statements Do not breathe dust.
In case of inadequate ventilation, wear respiratory protection.
Dispose of contents/containers in accordance with local regulations.



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Supplemental label Review the SDS for additional safety, health, environmental, transportation and classification information as it relates to this specific product and it's ingredients.

3.- Composition/information on ingredients

Mixture

Ingredients	CAS number	Concentration	Classification	R-Phases
Corundum	1302-74-5	42-58%	Not classified	Not assigned
Mullite	1302-93-8	36-58%	Not Classified	Not assigned

The full information about Hazard Statements can be find in Hazard Statements section.

4.- First aid measures

Description of first aid measures

Inhalation Remove affected person from source of exposure to fresh air zone. Get medical attention if necessary.

Ingestion Seek medical attention if large quantities are ingested. Give plenty of water. Do not induce vomiting and never give water to an unconscious person.

Eye contact Immediately flush eyes with large amounts of water, lifting the lower and upper lids occasionally. If irritation is present after washing, get medical attention.

Skin contact Wash the affected area with soap and water. Get medical attention if irritation occurs.

5.- Fire-fighting measures

Extinguishing media

Suitable extinguishing media Product is non-combustible, un-flammable and un-volatile.

Special hazars arising from the substance or mixture

Hazardous combustion None know



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Advice for firefighters

Special equipment Use protective equipment appropriate for surrounding materials.

6.- Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of dust. Use proper respiratory and person protective equipment MSHA/NIOSH or OSHA/NIOSH respirator should be used if required to control personnel exposure to allowable levels. Spilled materials (both wet and dry) may cause slippery conditions. Care should be exercised when walking on spills or floors or concrete pads.

Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground

Methods and material for containment and cleaning up

Methods for cleaning up Flush spilled material into an effluent treatment plant or proceed as follows. Vacuum, pump or scoop spilled materials into containers for reclaim or disposal. Do not use dry sweeping methods or compressed air for clean-up of spills/residues. Dispose of contents/container in accordance with local regulations.

Reference to other sections See Section 11 for additional information on health hazards.

7.- Handling and storage

Precautions for safe handling

Usage precautions Avoid generation and spreading of dust. Avoid inhalation of dust using personal protective equipment.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in a cool, dry location and away from other chemical materials is recommended.



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8.- Exposure controls/personal protection

Control parameters

Exposure limits

INGREDIENTS	OSHA PEL-TWA	ACGIH-TWA TLV
Corundum	15 mg/m ³ (Al ₂ O ₃) – Total dust 5 mg/m ³ (Al ₂ O ₃) – Respirable	10 mg/m ³ – Total 3 mg/m ³ – Respirable
Mullite	15 mg/m ³ – Total 5 mg/m ³ - Respirable	10 mg/m ³ – Total 3 mg/m ³ – Respirable

Long-term exposure limit (8 hours TWA): OSHA 15 mg/m³ – Total dust

Long term exposure limit (8 hours TWA): ACGIH 2 mg/m³ – Respirable fraction

Long term exposure limit (8 hours TWA): OSHA 5 mg/m³ – Respirable fraction

A4

TWA – TIME-WEIGHTED AVERAGE

OSHA – OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

A4 – NOT CLASSIFIABLE AS A HUMAN CARCINOGEN

Exposure controls

- Engineers control Provide enough (general and/or local exhaust) ventilation to maintain exposure below permissible air concentrations according regulatory limits. Exposure to this material depends on how the material is used and the time frame for exposure. There may be many measures appropriate for worksite. Use of the basic principles of industrial hygiene is advised for safe handling of the material.

- Eye/Face protection Wear safety glasses or chemical goggles to prevent eye contact. Do not wear contact lenses when working with this substance unless protected under full coverage goggles.

- Hand protection Use general purpose gloves as necessary to protect against drying of skin in case of prolonged usage. Follow good hygiene practices to include washing hands with soap and water.

- Hygiene measures Wash hands thoroughly after handling



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Respiratory protection An applicable NIOSH/MSHA or equivalent approved respirator should be worn where airborne exposures may exceed OSHA/ACGIH permissible air concentrations. Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

9.- Physical and Chemical properties

Information on basic physical and chemical properties

Appearance	Brown to dark green spherical particles/powder
Color	Brown, Dark green
Odor	Odorless
Melting points	4000 °F (estimated)
Initial boiling point and range	Not applicable
Flash point	Not applicable
Evaporation rate	Not applicable
Other flammability	This material is not combustible
Vapor pressure	Not applicable
Vapor density	Not applicable
Auto-ignition temperature	Not applicable
Explosive under flame	This product is not combustible or explosive
Solubility of water	Insoluble
Specific gravity	3.3 (H2O=1)
Bulk density	110 lb/ft3 (1.80 gr/cm3)
% Volatile by weight	Not applicable
Volatile organic compounds	0 lb/gal



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10.- Stability and reactivity

Reactivity	No specific reactivity hazards are associated with this product
Stability	Stable under normal temperature and recommended use
Possibility of reaction	None know
Incompatible materials	Chloride Trifluoride
Hazardous decomposition	None know

11.- Toxicological information

Information on toxicological effects

Toxicological effects	This product is not toxic (oral, dermal or inhalation)
Acute effects	Coughing and throat irritation are early symptoms of excessive exposure. May cause irritation to the respiratory system, lungs and skin. May also irritate eyes.
Chronic effects	Chronic exposure in excess of established human exposure levels can cause severe respiratory disease.

Skin sensitization

Skin sensitization	This product is not knowing to cause skin sensitization.
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Carcinogenicity

Carcinogenicity	This product contains crystalline silica (cristobalite) in the ceramic matrix. The crystalline silica inhaled in the form of quartz or cristobalite can be considered carcinogenic to humans. However, crystalline silica (cristobalite) contained in the ceramic proppant produce by CHANGQING is bound into the ceramic matrix and it was determined that the percentage of particles with size less than 100 micro (inhalable fraction) is below 0.1%, for this reason this material is not classify as a carcinogec.
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12.- Ecological information

Ecotoxicity	This product poses no significant environmental impact during expected use, handling and proper disposal.
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13.- Disposal consideration

Waste treatment methods

Disposal methods	Disposal must be at an approved waste disposal facility in accordance with applicable Federal, State or Local laws and regulations. Contact the district Director of the Environmental Protection Agency and/or state regulatory agency for appropriate requirements.
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14.- Transport information

General	This product is not covered by international regulations on the transport of dangerous goods (ICAAO/IATA – RID/ADR – CAN – IMO – UN NO – IMDG – DoT)
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Transport hazard class(es)

Not Regulated

15.- Regulatory information

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

This product does not contain ingredients subject to the reporting requirement

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

No RQ Assigned

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

This product does not contain ingredients subject to the reporting requirement.

SARA 313 Emission Reporting

None of the ingredients in Section 3 are included in the SARA 313 Chemical List.



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CAA Accidental Release Prevention

This product does not contain ingredients subject to the reporting requirement.

SARA (311/312) Hazardous Categories

This product is subject to the reporting requirements of SARA 312 at a threshold quantity of 10000 pounds

OSHA Highly Hazardous Chemicals

This product does not contain ingredients subject to the reporting requirement.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

This product contains trace levels of one or more naturally-occurring material know to the State of California to cause cancer, birth defects, or reproductive ham.

Massachusetts "Right to Know" List

Present.

Rhode Island "Right to Know" List

Present.

Minnesota "Right to Know" List

Present.

New Jersey "Right to Know" List

Present.

Pennsylvania "Right to Know" List

Present.

16.- Other information

ACA HMIS Health	1
ACA HMIS Physical hazard	0
ACA HMIS EPP	E
ACA HMIS Flammability	0