SAFETY DATA SHEET



CARBOECONOPROP

Section 1. Identification				
GHS product identifier	: CARBOECONOPROP			
Product category(ies)	: Oil and gas.			
Other means of identification	: Ceramic Proppant; Semi-Crystalling	: Ceramic Proppant; Semi-Crystalline Alumina Silicate; Sintered Kaolinite.		
Product type	: Solid.			
Relevant identified uses of the s	ubstance or mixture and uses advised a	against		
Proppant for oil and natural gas v	vell hydraulic fracturing.			
Supplier's details	: CARBO Ceramics Inc. 575 N. Dairy Ashford Road, Suite 3 Houston, Texas 77079, USA 1-800-551-3247	00		
Emergency telephone number	: For Chemical Emergency			
(with hours of operation)	Spill, Leak, Fire, Exposure, or Accid	ent		
	Call CHEMTREC Day or Night		(
	Within USA and Canada: 1-800-424	1-9300; Australia (Sydney): +	+(61)-290372994	
Section 2. Hazards identification	ation			
OSHA/HCS status Classification of the substance or mixture	 While this material is not considered (29 CFR 1910.1200), this SDS contains proper use of the product. This SD users of this product. Not classified. 	ains valuable information o	ritical to the safe handling and	
GHS label elements				
Signal word	: No signal word.			
Hazard statements	: No known significant effects or crit	ical hazards.		
Precautionary statements				
Prevention	: Not applicable.			
Response	: Not applicable.			
Storage	: Not applicable.			
Disposal	: Not applicable.			
Hazards not otherwise classified	: None known.			
Section 3. Composition/infe	ormation on ingredients			
Substance/mixture	: Article.			
CAS number/other identifiers				
Ingredient name		%	CAS number	

Ingredient name%CAS numberCeramic materials and wares, chemicals95 - 10066402-68-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

CARBOECONOPROP	
Section 4. First aid measu	res
Description of necessary first a	nid measures
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Most important symptoms/ef	
Potential acute health effect	=
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympto	<u>ms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate medio	cal attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting mea	sures
Extinguishing media Suitable extinguishing media Unsuitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: metal oxide/oxides
Special protective actions for fire-fighters Special protective equipment for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Section 6. Accidental releas	e measures
Personal precautions, protective	equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Date of issue/Date of revision

CARBOECONOPROP	
Section 6. Accidental releas	se measures
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for cont	ainment and cleaning up
Small spill	: Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
Section 7. Handling and sto	prage
Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
Ceramic materials and wares, chemicals		None.
Appropriate engineering controls	: Good general ventilation should be sufficient contaminants.	ent to control worker exposure to airborne
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
Individual protection measures		
Hygiene measures	smoking and using the lavatory and at the should be used to remove potentially con	ly after handling chemical products, before eating, end of the working period. Appropriate techniques taminated clothing. Wash contaminated clothing ions and safety showers are close to the workstation
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contac is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.	
Skin protection		
Hand protection		nplying with an approved standard should be worn at s if a risk assessment indicates this is necessary.
Body protection		dy should be selected based on the task being uld be approved by a specialist before handling this

CARBOECONOPROP	
Section 8. Exposure controls	s/personal protection
Other skin protection Respiratory protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Section 9. Physical and cher	nical properties
Appearance	
Physical state	: Solid. [Solid spheres.]
Color	: Light gray to light tan.
Odor	: Odorless.
Odor threshold	: Not applicable.
рН	: Not applicable.
Melting point	: 2204.5°C (4000.1°F)
Boiling point	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive	: Not available.
(flammable) limits Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 2.6
Solubility	: Not available.
Solubility in water	: Not applicable.
Partition coefficient: n-octanol/	: Not available.
water	
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.
Section 10. Stability and rea	ctivity
Reactivity	: Not considered to be reactive.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Strong oxidizer
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Section 11. Toxicological inf	ormation
Information on toxicological effe	cts
Acute toxicity	—
Not available.	
Irritation/Corrosion	
Not available.	
Sensitization	
Not available.	
<u>Mutagenicity</u>	
Not available.	
Carcinogenicity	
Not available.	

CARBOECONOPROP				
Section 11. Toxicological information				
Classification				
Product/ingredient name	OSHA	IARC	NTP	
Ceramic materials and wares, chemicals	-	3	-	
Reproductive toxicity		ł	· · · · · · · · · · · · · · · · · · ·	
Not available.				
<u>Teratogenicity</u>				
Not available.		_		
Specific target organ toxicity (sing	gle exposure)		
Not available.		,		
Specific target organ toxicity (rep	eated expos	sure)		
Not available.				
<u>Aspiration hazard</u> Not available.				
Not available.				
Information on the likely routes	: Not availa	able.		
of exposure				
Potential acute health effects				
Eye contact		-	effects or critical hazards.	
Inhalation	: No known significant effects or critical hazards.			
Skin contact	: No known significant effects or critical hazards.			
Ingestion	: No know	n significant	effects or critical hazards.	
Symptoms related to the physical,	chemical an	d toxicolog	ical characteristics	
Eye contact	: No specif	ic data.		
Inhalation	: No specif	ic data.		
Skin contact	: No specif	ic data.		
Ingestion	: No specif	ic data.		
Delayed and immediate effects an	d also chron	ic effects fr	om short and long term exposure	
Short term exposure				
Potential immediate effects	: Not avail	able.		
Potential delayed effects :	Not avail	able.		
Long term exposure				
Potential immediate effects	: Not avail	able.		
Potential delayed effects :	Not avail	able.		
Potential chronic health effects				
Not available.				
General		-	effects or critical hazards.	
Carcinogenicity		-	effects or critical hazards.	
Mutagenicity		-	effects or critical hazards.	
Teratogenicity		-	effects or critical hazards.	
Developmental effects		-	effects or critical hazards.	
Fertility effects	: No knowi	n significant	effects or critical hazards.	
Numerical measures of toxicity				

Numerical measures of toxicity

Acute toxicity estimates

N/A

CARBOECONOPROP Section 12. Ecological information Toxicity Not available. Persistence and degradability Not available. **Bioaccumulative potential** Not available. Mobility in soil Soil/water partition : Not available. coefficient (Koc) Other adverse effects : No known significant effects or critical hazards. Section 13. Disposal considerations **Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material

Section 14. Transport information					
	DOT Classification	TDG Classification	Mexico Classification	IMDG	ΙΑΤΑ
UN number	Not available.	Not available.	Not available.	Not available.	Not available.
UN proper shipping name	Not available.	Not available.	Not available.	Not available.	Not available.
Transport hazard class(es)	Not available.	Not available.	Not available.	Not available.	Not available.
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

waterways, drains and sewers.

Special precautions for user

: **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil,

Transport in bulk according to: Not available.IMO instruments

CARBOECONOPROP		
Section 15. Regulatory information		
U.S. Federal regulations	: TSCA 8(a) CDR Exempt/Partial exemption: Not determined	
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	: Not listed	
Clean Air Act Section 602 Class I Substances	: Not listed	
Clean Air Act Section 602 Class Il Substances	: Not listed	
DEA List I Chemicals (Precursor Chemicals)	: Not listed	
DEA List II Chemicals (Essential Chemicals)	: Not listed	
<u>SARA 302/304</u>		
Composition/information on	ingredients	
No products were found.		
SARA 304 RQ	: Not applicable.	
<u>SARA 311/312</u>		
Classification	: Not applicable.	
Composition/information on	<u>ingredients</u>	
No products were found.		
State regulations		
Massachusetts	: None of the components are listed.	
New York	: None of the components are listed.	
New Jersey	: None of the components are listed.	
Pennsylvania	: None of the components are listed.	
California Prop. 65		
-	quire a Safe Harbor warning under California Prop. 65.	
International regulations		
	List Schedules I, II & III Chemicals	
Not listed.		
Montreal Protocol		
Not listed.	istant Organia Dellutanta	
Stockholm Convention on Pers Not listed.	istent Organic Pollutants	
Rotterdam Convention on Prio	r Informad Consont (PIC)	
Not listed.	r mormed consent (PIC)	
UNECE Aarhus Protocol on POP	Ds and Heavy Metals	
Not listed.		
Inventory list		
Australia	: All components are listed or exempted.	
Canada	: All components are listed or exempted.	
China	: All components are listed or exempted.	
Europe	: All components are listed or exempted.	
Japan	: Japan inventory (CSCL): Not determined.	
-	Japan inventory (ISHL): All components are listed or exempted.	
New Zealand	: All components are listed or exempted.	
Philippines	: All components are listed or exempted.	
Republic of Korea	: All components are listed or exempted.	
Taiwan	: All components are listed or exempted.	
Thailand	: Not determined.	
Turkey	: All components are listed or exempted.	
United States	: All components are listed or exempted.	
Viet Nam	: Not determined.	

CARBOECONOPROP

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS[®] ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS[®] ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS[®] ratings are to be used with a fully implemented HMIS[®] program. HMIS[®] is a registered trademark and service mark of the American Coatings Association, Inc. The customer is responsible for determining the PPE code for this material. For more information on HMIS[®] Personal Protective Equipment (PPE) codes, consult the HMIS[®] Implementation Manual.

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Classification	Justification
Not classified.	

<u>History</u>	
Date of printing	: 1/20/2022
Date of issue/Date of revision	: 5/06/2024
Date of previous issue	: 10/22/2019
Version	: 3
Key to abbreviations	: ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as
	modified by the Protocol of 1978. ("Marpol" = marine pollution)
	N/A = Not available
	SGG = Segregation Group
	UN = United Nations
References	: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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