

Safety Data Sheet CCS CrackAttack® FINE

Revision Date: 04/27/2026

Section 1. Identification

Product identifier

Product Identity

CCS CrackAttack® FINE

Other means of identification

CCS CrackAttack® FINE
High Temperature Cement, Refractory Cement

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Chemical intermediate
for research and industrial use only
Restrictions on use: Food ingredient, cosmetic
ingredient

Details of the supplier of the safety data sheet

Company Name

Comprehensive Materials Solutions LLC
480 Old Erwin Hwy
Greeneville TN 37745
United States

Customer Service:

www.castingconsulting.com
(423) 564-0101

Section 2. Hazard(s) identification

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Skin corrosion/irritation category 2;H315

Causes skin irritation.

Serious eye damage / eye irritation, category 1;H318

Causes serious eye damage.

Carcinogen, category 1A;H350

May cause cancer.

Label elements



Danger

H315 Causes skin irritation.

H318 Causes serious eye damage.

H350 May cause cancer.

[Prevention]

P201 Obtain special instructions before use.

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P202 Do not handle until all safety precautions have been read and understood.

P264 Wash thoroughly after handling.

P280 Wear protective gloves, eye protection, and face protection.

[Response]

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+313 IF exposed or concerned: Get medical advice or attention.

P310 Immediately call a POISON CENTER, doctor or physician.

P332+313 If skin irritation occurs: Get medical attention.

P362+364 Take off contaminated clothing and wash it before reuse.

[Storage]

P405 Store locked up.

[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

This product contains no PBT/vPvB chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Kyanite CAS Number: 1302-76-7 Synonyms: Kyanite	10 - 30	Not Classified	No data available
Calcium Aluminate CAS Number: 65997-16-2 Synonyms: Calcium aluminates	10 - 30	Skin corrosion/irritation category 2;H315 Serious eye damage / eye irritation, category 1;H318	No data available
Amorphous Silica CAS Number: 7631-86-9 Synonyms: Silica dioxide	3 - 7	Not Classified	No data available
Kaolin CAS Number: 1332-58-7 Synonyms: Kaolin	3 - 7	Not Classified	No data available
Aluminum oxide CAS Number: 1344-28-1 Synonyms: ALUMINUM OXIDE (AL ₂ O ₃),	3 - 7	Not Classified	No data available
calcined china clay CAS Number: 92704-41-1 Synonyms: Kaolin, calcined	3 - 7	Not Classified	No data available

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Crystalline silica (Quartz) (respirable) CAS Number: 14808-60-7 Synonyms: Crystalline silica (Quartz) (respirable)	1 - 5	Carcinogen, category 1A;H350	No data available
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The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
Most important symptoms and effects, both acute and delayed	
Overview	No specific symptom data available. Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure. Treat symptomatically. See section 2 for further details.
Eyes	Causes serious eye damage.
Skin	Causes skin irritation.

Section 5. Fire-fighting measures

Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.

Unsuitable extinguishing media: Do not use; water jet.

Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

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Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Methods and material for containment and cleaning up

Sweep up or pick up.

Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Avoid contact with skin and eyes. Do not breathe dust. Avoid dust formation. Provide local exhaust or general room ventilation to minimize exposure to dust. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work.

See section 2 for further details. - [Prevention]

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a dry, well-ventilated place.

Incompatible materials: No data available.

See section 2 for further details. - [Storage]

Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

Control parameters

Exposure

CAS No.	Ingredient	Source	Value
1302-76-7	Kyanite	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
1332-58-7	Kaolin	OSHA	TWA 15 mg/m ³ (total) TWA 5 mg/m ³ (resp)

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		ACGIH	TWA: 2 mg/m ³
		NIOSH	TWA 10 mg/m ³ (total) TWA 5 mg/m ³ (resp)
1344-28-1	Aluminum oxide	OSHA	TWA 15 mg/m ³ (total) TWA 5 mg/m ³ (resp)
		ACGIH	No Established Limit
		NIOSH	no established RELs
7631-86-9	Amorphous Silica	OSHA	TWA 20 mppcf (80 mg/m ³ /%SiO ₂)
		ACGIH	No Established Limit
		NIOSH	TWA 6 mg/m ³
14808-60-7	Crystalline silica (Quartz) (respirable)	OSHA	PEL 50 µg/m ³
		ACGIH	TWA: 0.025 mg/m ³
		NIOSH	0.05 mg/m ³ TWA (respirable)
65997-16-2	Calcium Aluminate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
92704-41-1	calcined china clay	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit, they must use the appropriate, certified respirators.

Eyes

Protective safety glasses recommended

Skin

Protective gloves recommended.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State

Solid

Color

Tan Powder

Odor

No data available.

Melting point / freezing point

Melting point: >1700 °C

Initial boiling point and boiling range

Not Available

Flammability (solid, gas)

Not Applicable

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Upper/lower flammability or explosive limits

Lower Explosive Limit: Not Available

Upper Explosive Limit: Not Available

Flash Point

Not Available

Auto-ignition temperature

Not Available

Decomposition temperature

Not Available

pH

Not Available

Viscosity (cSt)

Not Available

Solubility in Water

Insoluble

Partition coefficient n-octanol/water (Log Kow)

Not Available

Vapor pressure (Pa)

Not Available

Relative Density

2.72 g/cc

Vapor Density

Not Available

Particle Characteristics

Evaporation rate (Ether = 1)

Not Available

VOC Content

Not Available

Refractive Index

1.63

Other information

No other relevant information.

Section 10. Stability and reactivity

Reactivity

Hazardous Polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No data available.

Conditions to avoid

No data available.

Incompatible materials

No data available.

Hazardous decomposition products

No hazardous decomposition data available.

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Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Kyanite - (1302-76-7)	No data available.	No data available.	No data available.	No data available.	No data available.
Calcium Aluminate - (65997-16-2)	No data available.	No data available.	No data available.	No data available.	No data available.
Amorphous Silica - (7631-86-9)	> 5,000.00, Rat - Category: NA	> 5,000.00, Rabbit - Category: NA	No data available.	No data available.	No data available.
Kaolin - (1332-58-7)	No data available.	No data available.	No data available.	No data available.	No data available.
Aluminum oxide - (1344-28-1)	> 15,900.00, Rat - Category: NA	No data available.	No data available.	> 0.89, Rat - Category: NA	No data available.
calcined china clay - (92704-41-1)	No data available.	No data available.	No data available.	No data available.	No data available.
Crystalline silica (Quartz) (respirable) - (14808-60-7)	No data available.	100,000.00 - Category: NA	No data available.	No data available.	No data available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
1302-76-7	Kyanite	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
1332-58-7	Kaolin	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	A4
1344-28-1	Aluminum oxide	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
7631-86-9	Amorphous Silica	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes;
		ACGIH	No Established Limit
14808-60-7	Crystalline silica (Quartz) (respirable)	OSHA	Regulated Carcinogen: No;
		NTP	Known: Yes; Suspected: No;

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		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	A2
65997-16-2	Calcium Aluminate	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit
92704-41-1	calcined china clay	OSHA	Regulated Carcinogen: No;
		NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	May cause skin irritation.
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	1A	May cause cancer.
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Possible routes of entry: No data available.

Symptoms and effects, both acute and delayed:

No specific symptom data available.

Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.

Treat symptomatically.

Skin

May cause skin irritation.

Section 12. Ecological information

Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

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Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Kyanite - (1302-76-7)	No data available.	No data available.	No data available.
Calcium Aluminate - (65997-16-2)	No data available.	No data available.	No data available.
Amorphous Silica - (7631-86-9)	1,033.02, Fishes species	512.08, Daphnid species	> 10,000.00, Desmodesmus subspicatus
Kaolin - (1332-58-7)	No data available.	No data available.	No data available.
Aluminum oxide - (1344-28-1)	114.97, Channa marulius	1.90, Ceriodaphnia dubia	0.57, Pseudokirchneriella subcapitata
calcined china clay - (92704-41-1)	No data available.	No data available.	No data available.
Crystalline silica (Quartz) (respirable) - (14808-60-7)	No data available.	No data available.	No data available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

Not Available

Mobility in soil

No data available.

Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

Other adverse effects

No data available.

Section 13. Disposal considerations

Waste treatment methods

Waste should not be released to sewers. Observe all federal, state, and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	Not Regulated	Not Regulated	Not Regulated
UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
Transport hazard class(es)	DOT Hazard Class: Not Applicable Sub Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable Sub Class: Not Applicable

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Packing group Not Applicable Not Applicable Not Applicable

Environmental hazards

Marine Pollutant: No;

Special precautions for user

Not Applicable

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Toxic Substance Control Act (TSCA)

CAS Number	Ingredient	Toxic Substance Control Act (TSCA)	Comments	Status
0001344-28-1	Aluminum oxide	Yes		ACTIVE
0007631-86-9	Amorphous Silica	Yes		ACTIVE
0092704-41-1	calcined china clay	Yes	UVCB	ACTIVE
0065997-16-2	Calcium Aluminate	Yes	UVCB	ACTIVE
0014808-60-7	Crystalline silica (Quartz) (respirable)	Yes	Present	
0001332-58-7	Kaolin	Yes	UVCB	ACTIVE
0001302-76-7	Kyanite	Yes		ACTIVE

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

Crystalline silica (Quartz) (respirable)

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:



WARNING: This product can expose you to chemicals including [Crystalline silica (Quartz) (respirable)], which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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Section 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H315 May cause skin irritation.

H350 May cause cancer.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

End of Document