

SAFETY DATA SHEET

Trona Ore

SDS # : 533-96-0-5
Revision date: 2015-03-27
Format: NA
Version 1

TRONOX

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Trona Ore

Other means of identification

Product Code(s) 533-96-0-5

Synonyms Trisodium Hydrogencarbonate, Sesqui

Recommended use of the chemical and restrictions on use

Recommended Use: Raw material

Restrictions on Use: See section 16 for more information

Manufacturer Address

Tronox Alkali Wyoming Corporation
1735 Market Street
Philadelphia, PA 19103
Tel: +1 877 / 362-2248 or +1 215 / 299-6904
www.tronox.com

Emergency telephone number

1 307 / 872 2452 (Plant - Green River, WY)
(303) 595-9048 (Medical - U.S. - Call Collect)

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 1A

GHS Label elements, including precautionary statements**EMERGENCY OVERVIEW****Danger****Hazard Statements**

H319 - Causes serious eye irritation

H350 - May cause cancer

**Precautionary Statements - Prevention**

P201 - Obtain special instructions before use

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

Precautionary Statements - Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

P337 + P313 - If eye irritation persists: Get medical advice/ attention

Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS**Formula**NaHCO₃.Na₂CO₃

Chemical name	CAS-No	Weight %
Sodium Sesquicarbonate	533-96-0	90-98
crystalline silica, quartz	14808-60-7	<2

The product is a non-purified raw material.

Synonyms are provided in Section 1.

4. FIRST AID MEASURES**Eye Contact**

Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.

Skin Contact	Wash skin with soap and water. Get medical attention if irritation develops and persists.
Inhalation	Remove person to fresh air. If signs/symptoms continue, get medical attention.
Ingestion	Rinse mouth with water and afterwards drink plenty of water or milk Get medical attention if symptoms occur
Most important symptoms and effects, both acute and delayed	None known.
Indication of immediate medical attention and special treatment needed, if necessary	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific Hazards Arising from the Chemical	None in particular. Not combustible
Hazardous Combustion Products	Fumes of sodium oxide.
Explosion data	
Sensitivity to Mechanical Impact	Not sensitive.
Sensitivity to Static Discharge	Not sensitive.
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid breathing dust. For personal protection see section 8.
Other	For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
Environmental Precautions	See Section 12 for additional Ecological Information.
Methods for Containment	Vacuum or shovel waste into a drum and label contents for disposal. Prevent large quantities of this product from contacting vegetation or waterways.
Methods for cleaning up	If material is not soiled or contaminated, it can be re-used indefinitely. Sweep or vacuum up spillage and return to container. Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Handling	Keep away from incompatible products (acids). Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Refer to Section 8.
Storage	Store in original container. Keep in a dry place. Keep in properly labeled containers. Keep container tightly closed.
Incompatible products	Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Local nuisance dust standards apply Ingredients with workplace control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
crystalline silica, quartz 14808-60-7	TWA: 0.025 mg/m ³	See note	IDLH: 50 mg/m ³ TWA: 0.05 mg/m ³	Mexico: TWA 0.1 mg/m ³
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
crystalline silica, quartz 14808-60-7	TWA: 0.025 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.10 mg/m ³	TWA: 0.025 mg/m ³

Note: OSHA PEL = 10 mg/m³/ %Si + 2, where the %Si is the concentration (in percent) of respirable crystalline silica in the sample collected, not the bulk material

Appropriate engineering controls

Engineering measures Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and Body Protection Wear suitable protective clothing. Protective shoes or boots.

Hand Protection Protective gloves

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of workday.

General information If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Off white to yellow-brown, fine powder
Physical State	Solid
Color	White to yellowish-brown
Odor	Odorless to slight, sour, pungent odor
Odor threshold	Not applicable
pH	9.9 (1% solution)
Melting point/freezing point	Decomposes on heating
Boiling Point/Range	No information available
Flash point	Not applicable
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Density	No information available
Specific gravity	2.12
Water solubility	17.1 % @ 25 °C (as Sesqui)
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	Decomposes upon heating
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	No information available

Oxidizing properties Non-oxidizing
Molecular weight No information available
Bulk density 0.74 g/cm³
K_{st} 0 bar m/s

10. STABILITY AND REACTIVITY

Reactivity Not applicable
Chemical Stability Stable under recommended storage conditions.
Possibility of Hazardous Reactions None under normal processing.
Hazardous polymerization Hazardous polymerization does not occur.
Conditions to avoid Avoid contact with acids
Incompatible materials Acids.
Hazardous Decomposition Products Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral > 2000 mg/kg (rat) (Similar product)
LD50 Dermal No information available
LC50 Inhalation > 5.03 mg/L 4 hr (rat) (Similar product)
Eye Contact Irritating to eyes
Skin Contact Non-irritating
Sensitization Non-sensitizing, Guinea pig. (Similar product).

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
crystalline silica, quartz (14808-60-7)	= 500 mg/kg (Rat)		

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity Chronic exposure to silica dust may increase the risk of developing pneumoconiosis or silicosis, chronic diseases affecting the lungs, characterized by labored breathing, cough, reduction of work capacity, reduction of lung capacity, heart enlargement and failure.
Mutagenicity No information available
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Chemical name	ACGIH	IARC	NTP	OSHA
crystalline silica, quartz 14808-60-7	A2	Group 1	Known	X

12. ECOLOGICAL INFORMATION

Ecotoxicity

Persistence and degradability Biodegradability does not pertain to inorganic substances.

Bioaccumulation Does not bioaccumulate.

Mobility Dissociates into ions.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT NOT REGULATED

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains chemicals known to the State of California to cause cancer or reproductive toxicity.

Chemical name	California Prop. 65
crystalline silica, quartz - 14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
crystalline silica, quartz 14808-60-7	X	X	X

International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Sodium Sesquicarbonate 533-96-0 (90-98)	X	X	X	X	X	X	X	X
crystalline silica, quartz 14808-60-7 (<2)	X	X	X	X	X	X	X	X

Chemical name	Carcinogen Status	Mexico
crystalline silica, quartz		Mexico: TWA 0.1 mg/m ³

WHMIS Statement

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class D2A - Very toxic materials



16. OTHER INFORMATION

NFPA	Health Hazards 2	Flammability 0	Instability 0	Special Hazards -
HMIS	Health Hazards 2*	Flammability 0	Physical hazard 0	Personal Protection X

*Indicates a chronic health hazard.

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

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 Revision note: Format Change

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Prepared By:

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End of Safety Data Sheet