



United States Steel Corporation

Cokonyx

Safety Data Sheet (SDS)

USS IHS Number: 82337

Locations: Gary Works

Revision: 10/22/2020

Original: 12/16/2010

Section 1 – Identification

1(a) Product Identifier used on Label: Cokonyx

1(b) Other Means of Identification: None

1(c) Recommended use of the chemical and restrictions on use: Fuel for Blast furnace; None

1(d) Name, Address, and Telephone Number:

United States Steel Corporation Phone number: (412) 433-6840 (8:00 am to 5:00 pm)
 600 Grant Street, Room 1662 FAX: (412) 433-5019
 Pittsburgh, PA 15219-2800

1(e) Emergency Phone Number: 1-800-262-8200 (CHEMTREC)

Section 2 – Hazard(s) Identification

2(a) Classification of the Chemical: Cokonyx is considered a hazardous material according to the criteria specified in REACH [REGULATION (EC) No 1907/2006] and CLP [REGULATION (EC) No 1272/2008] and OSHA 29 CFR 1910.1200 Hazard Communication Standard. The categories of Health Hazards as defined in “GLOBALY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), Third revised edition ST/SG/AC.10/30/Rev. 3” United Nations, New York and Geneva, 2009 have been evaluated. Refer to Section 3, 8 and 11 for additional information.

2(b) Signal Word, Hazard Statement(s), Symbols and Precautionary Statement(s):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement(s)
	Carcinogenicity – 1A Single Target Organ Toxicity (STOT) Single Exposure – 2 STOT Repeated Exposure – 1	WARNING	<p>May cause cancer.</p> <p>Cause mechanical irritation to skin and lung irritation.</p> <p>Causes damage to lungs, autoimmune system and kidneys through prolonged or repeated exposure.</p> <p>Causes serious eye irritation.</p> <p>May form combustible dust concentrations in air.</p>
	Eye Irritation – 2A		
NA	Combustible Dust		

Precautionary Statement(s):

Prevention	Response	Storage/Disposal
<p>Do not breathe dusts or fume.</p> <p>Wear protective gloves / protective clothing / eye protection / face protection.</p> <p>Wash thoroughly after handling.</p> <p>Obtain special instructions before use.</p> <p>Do not handle until all safety precautions have been read and understood.</p> <p>Do not eat, drink or smoke when using this product.</p>	<p>If exposed, concerned or feel unwell: Get medical advice/attention, call a poison center or doctor.</p> <p>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.</p>	<p>Dispose of contents in accordance with federal, state and local regulations.</p>

2(c) Hazards not Otherwise Classified: None Known

2(d) Unknown Acute Toxicity Statement (Mixture): None Known

Section 3 – Composition/Information on Ingredients

3(a-c) Chemical Name, Common Name (Synonyms), CAS Number and Other Identifiers, and Concentration:

Chemical Name	CAS Number	EC Number	% weight
Carbon	7440-44-0	231-153-3	97-98
Crystalline Silica (as Quartz)	14808-60-7	238-878-4	1-2
Aluminum	7429-90-5	231-072-3	0-1
Sulfur	7704-34-9	231-722-6	0-1

EC- European Community

CAS- Chemical Abstract Service

Section 4 – First-aid Measures

4(a) Description of Necessary Measures: If exposed, concerned or feel unwell: Get medical advice/attention, call a poison center or Doctor.

- **Inhalation:** If exposed, concerned or feel unwell: Get medical advice/attention, call a poison center or doctor.
- **Eye Contact:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice attention.
- **Skin Contact:** If on skin: Take off contaminated clothing and wash it before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.
- **Ingestion:** If swallowed: Call a poison center or doctor if you feel unwell.

4(b) Most Important Symptoms/Effects, Acute and Delayed (Chronic):

Acute effects:

- **Inhalation:** Excessive exposure to high concentrations of dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tract.
- **Eye:** Particles are abrasive and may cause irritation to the eyes.
- **Skin:** Skin contact with dusts may cause irritation or sensitization, possibly leading to dermatitis. Skin contact with dusts may cause physical abrasion.
- **Ingestion:** Ingestion of dust may cause nausea and/or vomiting.

Chronic Effects:

Individuals with chronic respiratory disorders (i.e., asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by any fume or airborne particulate matter exposure. Persons with pre-existing skin disorders may be more susceptible to dermatitis.

4c Immediate Medical Attention and Special Treatment: Treat symptomatically.

Section 5 – Fire-fighting Measures

5(a) Suitable (and Unsuitable) Extinguishing Media: Steam, water fog, CO₂, foam, dry chemicals or sand. Small fires – Foam, CO₂, Dry Chemical, Water Spray. Large Fires – Water Spray, fog or foam.

5(b) Specific Hazards Arising from the Chemical: When burned, toxic smoke and vapor may be emitted including, oxides of carbon, metal oxides and other toxic vapors. **Cokonyx** dust may form combustible mixtures in the air.

5c Special Protective Equipment and Precautions for Fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 – Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Use only outdoors or in a well-ventilated area. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust. Personnel should be protected against contact with eyes and skin. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Avoid using compressed air. Do not release into sewers or waterways. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations.

6(b) Methods and Materials for Containment and Clean Up: Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements

Section 7 – Handling and Storage

7(a) Precautions for Safe Handling: Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not breathe dusts or fume. Wear protective gloves / protective clothing / eye protection / face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid direct contact on skin, eyes or on clothing. Emergency safety showers and eye wash stations should be present.

7(b) Conditions for Safe Storage, including any Incompatibilities: Whenever feasible, store locked up.

Section 8 – Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): The following exposure limits are offered as reference, for an experience industrial hygienist to review.

Ingredients	OSHA PEL ¹	ACGIH TLV ²	NIOSH REL ³	IDLH ⁴
Carbon	NE ⁵	NE ⁶	NE	NE
Crystalline Silica (as Quartz)	0.05 mg/m ³ “AL” 0.025 mg/m ³	0.025 mg/m ³ (as respirable fraction ⁷)	0.05 mg/m ³ (as respirable dust), Ca	50 mg/m ³ (as quartz, Tripoli) 25 mg/m ³ (as cristobalite, tridymite), Ca
Aluminum	15 mg/m ³ (as aluminum oxide, metal & insoluble compounds, total dust) 5.0 mg/m ³ (as aluminum oxide, metal & insoluble compounds, respirable fraction)	1.0 mg/m ³ (as metal & insoluble compounds, respirable fraction)	10 mg/m ³ (as metal & insoluble compounds, total dust) 5.0 mg/m ³ (as metal & insoluble compounds, respirable fraction)	NE
Sulfur	NE	NE	NE	NE

NE – None Established

- OSHA PELs (Permissible Exposure Limits) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A (“C”) designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.
- Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. ACGIH TLVs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes. DSEN – May cause dermal sensitization. This notation is used to indicate the potential for dermal sensitization resulting from the interaction of an absorbed agent and ultraviolet light (i.e. photosensitization). RSEN – May cause respiratory sensitization.
- The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL)- Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
- The “immediately dangerous to life or health air concentration values (IDLHs)” are used by NIOSH as part of the respirator selection criteria and were first developed in the mid-1970’s by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994. Ca is designated as carcinogen.
- PNOR (Particulates Not Otherwise Regulated). All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name are covered by a limit which is the same as the inert or nuisance dust limit of 15 mg/m³ for total dust and 5.0 mg/m³ for the respirable fraction.
- PNOS (Particulates Not Otherwise Specified). Particulates identified under the PNOS heading are “nuisance dusts” containing no asbestos or crystalline silica.
- Respirable fraction. The concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with the characteristics defined in ACGIH 2020 TLVs[®] and BEIs[®] Appendix D, paragraph C.

8(b) Appropriate Engineering Controls: Local exhaust ventilation should be used to control the emission of air contaminants. General dilution ventilation may assist with the reduction of air contaminant concentrations. Emergency eye wash stations and deluge safety showers should be available in the work area.

8c Individual Protection Measures:

- Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

Warning! Air-purifying respirators both negative-pressure and powered-air do not protect workers in oxygen-deficient atmospheres.

- Eyes:** Wear appropriate eye protection to prevent eye contact. Use safety glasses with side shields or chemical goggles.
- Skin:** Persons handling this product should wear appropriate clothing to prevent skin contact. Wear protective gloves.
- Other protective equipment:** An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 – Physical and Chemical Properties

9(a) Appearance (physical state, color, etc.): Cellular, carbonaceous, black cinder-like material, porous consistency

9(b) Odor: NA

9c Odor Threshold: NA

9(d) pH: NA

9e Melting Point/Freezing Point: NA

9(j) Upper/Lower Flammability or Explosive Limits: NA

9(k) Vapor Pressure: NA

9(l) Vapor Density (Air = 1): NA

9(m) Relative Density: NA

9(n) Solubility(ies): 0.01%

Section 9 – Physical and Chemical Properties (continued)

9(f) Initial Boiling Point and Boiling Range: NA

9(o) Partition Coefficient n-octanol/water: NA

9(g) Flash Point: NA

9(p) Auto-ignition Temperature: ND

9(h) Evaporation Rate: NA

9(q) Decomposition Temperature: ND

9(i) Flammability (solid, gas): Combustible

9(r) Viscosity: ND

NA – Not Applicable

ND – Not Determined for product as a whole

Section 10 – Stability and Reactivity

10(a) Reactivity: Not Determined (ND)

10(b) Chemical Stability: Cokonyx is stable under normal storage and handling conditions.

10(c) Possibility of Hazardous Reaction: None Known





10(d) Conditions to Avoid: Storage with incompatible materials. Flames and ignition sources where dust can accumulate.

10(e) Incompatible Materials: Strong acids and bases

10(f) Hazardous Decomposition Products: Oxides of carbon, sulfur, metal oxides, hydrogen sulfide and other toxic vapors may be released at elevated temperatures.

Section 11 – Toxicological Information

11(a-e) Information on Toxicological Effects: The following toxicity data has been determined for Cokonyx by using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL:

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
Eye Damage/Irritation (covers Categories 1, 2A and 2B)	2	2A ^c		Warning	Causes serious eye irritation.
Germ Cell Mutagenicity (covers Categories 1A, 1B and 2)	2	NR [*]	NA	NA	NA
Carcinogenicity (covers Categories 1A, 1B and 2)	1A	1A ^g		Danger	May cause cancer.
Specific Target Organ Toxicity (STOT) Following Single Exposure (covers Categories 1-3)	2	2 ⁱ		Warning	Causes mechanical irritation to skin and lung irritation.
STOT Following Repeated Exposure (covers Categories 1 and 2)	1	1 ^j		Danger	Causes damage to lungs, autoimmune system and kidneys through prolonged or repeated exposure.

* NR Not Rated – Available data does not meet criteria for classification.

The Toxicological data listed below are presented regardless to classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

a. No LC₅₀ or LD₅₀ has been established for Cokonyx. The following data has been determined for the components:

- **Carbon** : LD₅₀ = >10,000 mg/kg (Oral/ Rat)
- **Sulfur**: LD₅₀ = 2500 mg/kg (Oral/Rabbit)
- **Silica** : Rat LD₅₀ = 500 mg/kg (Oral/ Rat)
- **Aluminum**: LD₅₀ = >15.9 g/kg (Oral/Rat)

b. No Skin (Dermal) Irritation data available for Cokonyx as a mixture. The following Skin (Dermal) Irritation data has been determined for the components:

- **Sulfur**: Rabbit Irritation Edema & Erythema 4 at 72 hrs all resolved by day 7 (REACH).

c. No Eye Irritation data available for Cokonyx as a mixture. The following Eye Irritation information was found for the components:

- **Silicon Dioxide**: Crystalline silica may cause abrasion of the cornea.

d. No Skin (Dermal)/Respiratory Sensitization data available for Cokonyx as a mixture or its individual components.

e. No Aspiration Hazard data available for Cokonyx as a mixture or its individual components.

f. No Germ Cell Mutagenicity data available for Cokonyx as a mixture or its individual components.

g. Carcinogenicity: IARC, NTP, and OSHA do not list Cokonyx as carcinogens. The following Carcinogenicity information was found for the components:

- **Silica, crystalline (as quartz)**: IARC-1 (silica, crystalline), carcinogen to humans; ACGIH TLV-A2 (silica, crystalline), suspected human carcinogen; NTP-K, known to be a carcinogen; NIOSH-Ca, potential occupational carcinogen; OSHA-Ca, carcinogen.
- **Aluminum (metal and insoluble compounds)**: IARC-1 (production), carcinogen to humans; ACGIH TLV-A4, not classifiable as a human carcinogen.

h. No Toxic Reproduction data available for Cokonyx as a mixture or its individual components.

Section 11 – Toxicological Information (continued)

11(a-e) Information on Toxicological Effects (continued):

- i. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for **Cokonyx** as a mixture. The following STOT following a Single Exposure data was found for the components:
- **Silicon Dioxide:** Single exposure to very high airborne levels may cause lung irritation in exposed humans.
- j. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for **Cokonyx** as a whole. The following STOT following Repeated Exposure data was found for the components:
- **Silicon Dioxide:** Repeated exposure to crystalline silica causes silicosis and kidney damage as well as increased incidence of autoimmune disorders in humans.
 - **Aluminum:** Repeated exposure associated with Asthma, fibrosis in lungs and encephalopathy in humans.

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2020, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s):

Acute Effects by Component:

- **CARBON:** Not Reported/Not Classified
- **CRYSTALLINE SILICA (Silicon Dioxide):** Causes irritation and inflammation of the respiratory tract. May cause abrasion of the cornea. Inhalation may cause cough. A single exposure to very high airborne levels may cause lung irritation in exposed humans.
- **ALUMINUM:** Not Reported/ Not Classified
- **SULFUR:** Sulfur is harmful if swallowed, causes skin and eye irritation.

Delayed (chronic) Effects by Component:

- **CARBON:** Chronic inhalation may lead to decreased pulmonary function.
- **SILICA (Crystalline Quartz):** Inhalation of quartz is classified by IARC as a probable human carcinogen. Chronic exposure can cause silicosis, a form of lung scarring that can cause shortness of breath, reduced lung function, and in severe cases, death. Repeated exposure may cause kidney damage as well as increased incidence of autoimmune disorder.
- **ALUMINUM:** Chronic inhalation of finely divided powder has been reported to cause pulmonary fibrosis and emphysema. Repeated skin contact has been associated with bleeding into the tissue, delayed hypersensitivity and granulomas. Chronic exposure to aluminum flake has been reported to cause pneumoconiosis in workers. Repeat oral exposure to aluminum results in decrements in neurobehavioral function and development.
- **SULFUR:** Sulfur compounds, present in the fumes, may irritate the skin, eyes, lungs and gastrointestinal tract. May cause damage to the lung from prolonged or repeated exposure, Sulfur dioxide vapor is irritating to the respiratory tract and can cause lung damage with repeated or prolonged exposure.

Section 12 – Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No data available for the product, **Cokonyx** as a whole. However, individual components of the product have been found to be toxic to the environment. Dusts may migrate into soil and groundwater and be ingested by wildlife as follows:

- **Aluminum (as Aluminum Oxide):** LC₅₀ >100 mg/l for fish and algae

12(b) Persistence & Degradability: No Data Available

12(c) Bioaccumulative Potential: No Data Available

12(d) Mobility (in soil): No Data Available

12(e) Other Adverse Effects: None Known

Additional Information:

Hazard Category: No Category

Signal Word: No Signal Word

Hazard Symbol: No Hazard Symbol

Hazard Statement: No Hazard Statement

Section 13 – Disposal Considerations

Disposal: Dispose of contents/container in accordance with local/regional/international regulations.

Container Cleaning and Disposal: Follow applicable federal, state and local regulations. Observe safe handling precautions. European Waste Catalogue 16-03-06 (organic wastes other than those specified).

Please note this information is for Cokonyx in its original form. Any alterations can void this information.

Section 14 – Transport Information

14 (a-g) Transportation Information:

US Department of Transportation (DOT) under 49 CFR 172.101 does not regulate **Cokonyx** as a hazardous material. All federal, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.

Shipping Name: Cokonyx Shipping Symbols: NA Hazard Class: NA UN No.: NA Packing Group: NA DOT/ IMO Label: NA Special Provisions (172.102): NA	Packaging Authorizations: a) Exceptions: NA b) Non-bulk: NA c) Bulk: NA	Quantity Limitations: a) Passenger Aircraft or Rail: NA b) Cargo Aircraft Only: NA Vessel Stowage Location: NA DOT reportable quantities: NA
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International Maritime Dangerous Goods (IMDG) and the Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID) classification, packaging and shipping requirements follow the US DOT Hazardous Materials Regulation.

Regulations Concerning the International Carriage of Dangerous Goods by Road (ADR) does not regulate **Cokonyx** as a hazardous material.

Shipping Name: Cokonyx Classification Code: NA UN No.: NA Packing Group: NA ADR Label: NA Special Provisions: NA Limited Quantities: NA	Packaging: a) Packing Instructions: NA b) Special Packing Provisions: NA c) Mixed Packing Provisions: NA	Portable Tanks & Bulk Containers: a) Instructions: NA b) Special Provisions: NA
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International Air Transport Association (IATA) does not regulate **Cokonyx** as a hazardous material.

Shipping Name: Cokonyx Class/Division: NA Hazard Label (s): NA UN No.: NA Packing Group: NA Excepted Quantities (EQ): NA	Passenger & Cargo Aircraft		Cargo Aircraft Only: Pkg Inst: NA Max Net Qty/Pkg: NA	Special Provisions: NA ERG Code: NA
	Limited Quantity (EQ)			
	Pkg Inst: NA	Pkg Inst: NA		
	Max Net Qty/Pkg: NA	Max Net Qty/Pkg: NA		

Pkg Inst – Packing Instructions

Max Net Qty/Pkg – Maximum Net Quantity per Package

ERG – Emergency Response Drill Code

Cokonyx does not have a **Transport Dangerous Goods (TDG)** classification.


Section 15 – Regulatory Information

Regulatory Information: *The following listing of regulations relating to a U. S. Steel product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.* This product and/or its constituents are subject to the following regulations:

SARA Potential Hazard Categories: Immediate Acute Health Hazard, Delayed Chronic Health Hazard

SARA 313 Supplier Notification: This product, **Cokonyx** does not contain any of the toxic chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

State Regulations: The product, **Cokonyx** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

California Prop. 65:  This product can expose you to crystalline silica (airborne particles of respirable size only), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Other Regulations:

WHMIS Classification (Canadian): The product, **Cokonyx** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Silica Quartz	Carcinogenicity - Category 1A; Specific target organ toxicity - repeated exposure - Category 1
Carbon	Combustible dusts*
Sulfur	Flammable solids - Category 2; Skin corrosion/irritation - Category 2; Combustible dusts**

* This product could belong to the hazard class "Combustible dust", based on various factors related to the combustibility and explosiveness of its dust, including composition, shape and size of the particles

** This product belongs to the hazard class "Combustible dust" if 5% or more by weight of its composition has a particle size < 500 µm.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 – Other Information

Prepared By: United States Steel Corporation

Revision History:

09/10/2020 – Update to sections 2, 8 & 11
 06/26/2017 – Update WHMIS 2015
 4/14/2015 – Revision
 1/31/2014 – Format revision

Expiration Date: 10/22/2023

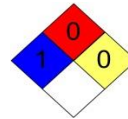
10/23/2013 – Update to OSHA HAZCOM 2012
 12/16/2010 - Original

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

National Fire Protection Association (NFPA)



HEALTH= 1, * Denotes possible chronic hazard if airborne dusts or fumes are generated Irritation or minor reversible injury possible.
 FIRE= 0, Materials that will not burn.
 PHYSICAL HAZARDS = 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

HEALTH = 1, Exposure could cause irritation but only minor residual injury even if no treatment is given.
 FIRE = 0, Materials that will not burn.
 INSTABILITY = 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists
BEIs	Biological Exposure Indices
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CNS	Central Nervous System
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
LC50	Median Lethal Concentration
LD50	Median Lethal Dose
LD_{Lo}	Lowest Dose to have killed animals or humans
LEL	Lower Explosive Limit
µg/m³	microgram per cubic meter of air
mg/m³	milligram per cubic meter of air
mppcf	million particles per cubic foot
SDS	Safety Data Sheet
MSHA	Mine Safety and Health Administration
NFPA	National Fire Protection Association

NIF	No Information Found
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
ORC	Organization Resources Counselors
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PNOR	Particulate Not Otherwise Regulated
PNOC	Particulate Not Otherwise Classified
PPE	Personal Protective Equipment
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RTECS	Registry of Toxic Effects of Chemical Substances
SARA	Superfund Amendment and Reauthorization Act
SCBA	Self-contained Breathing Apparatus
STEL	Short-term Exposure Limit
TLV	Threshold Limit Value
TWA	Time-weighted Average
UEL	Upper Explosive Limit

Disclaimer: This information is taken from sources or based upon data believed to be reliable. However, United States Steel Corporation makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.