

## **APOC ROOFSLOPE DP**

## **ICP Construction Inc.**

Version No: 9.11

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: **05/12/2023** Print Date: **05/12/2023** S.GHS.USA.EN

## **SECTION 1 Identification**

## **Product Identifier**

1 router technical	
Product name	APOC ROOFSLOPE DP
Synonyms	Not Available
Other means of identification	Not Available

## Recommended use of the chemical and restrictions on use

Relevant identified uses	Sloping compound
Relevant identified uses	Sloping compound

## Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	ICP Construction Inc.
Address	150 Dascomb Road Andover, MA 01810 United States
Telephone	1-866-667-5119 1-978-623-9987
Fax	Not Available
Website	www.icpgroup.com
Email	sds@icpgroup.com

## Emergency phone number

Association / Organ	nisation	ChemTel
Emergency tele	ephone umbers	1-800-255-3924
Other emergency tele	ephone umbers	1-813-248-0585

## SECTION 2 Hazard(s) identification

# Classification of the substance or mixture NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification

Carcinogenicity Category 1B, Specific Target Organ Toxicity - Single Exposure Category 2, Serious Eye Damage/Eye Irritation Category 1, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Skin Corrosion/Irritation Category 2, Sensitisation (Skin) Category 1, Germ Cell Mutagenicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 1

## Label elements

Hazard pictogram(s)







Signal word

Danger

## Hazard statement(s)

H350 May cause cancer.

Version No: 9.11 Page 2 of 13 Issue Date: 05/12/2023 Print Date: 05/12/2023

## APOC ROOFSLOPE DP

H371	May cause damage to organs.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H372	Causes damage to organs through prolonged or repeated exposure.

## Hazard(s) not otherwise classified

Not Applicable

## Precautionary statement(s) Prevention

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray
P271	Use only outdoors or in a well ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

## Precautionary statement(s) 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.
P302+P352 IF ON SKIN: wash with plenty of water.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

## Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

## Precautionary statement(s) Disposal

	P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
--	------	--

## **SECTION 3 Composition / information on ingredients**

## Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
14808-60-7	1-5	silica crystalline - quartz
65997-15-1	15-40	portland cement
13397-24-5	1-5	gypsum
1317-65-3	1-5	limestone
65996-69-2	1-5	blast furnace slag

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## **SECTION 4 First-aid measures**

Eye Contact	If this product comes in contact with the eyes:  Immediately hold eyelids apart and flush the eye continuously with running water.  Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.  Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.  Transport to hospital or doctor without delay.  Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs:  Immediately remove all contaminated clothing, including footwear.  Flush skin and hair with running water (and soap if available).  Seek medical attention in event of irritation.
Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor, without delay.</li> </ul>

Version No: 9.11 Page 3 of 13 Issue Date: 05/12/2023 Print Date: 05/12/2023

## APOC ROOFSLOPE DP

Ingestion

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

#### Most important symptoms and effects, both acute and delayed

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

For acute or short term repeated exposures to iron and its derivatives:

- Always treat symptoms rather than history
- In general, however, toxic doses exceed 20 mg/kg of ingested material (as elemental iron) with lethal doses exceeding 180 mg/kg.
- Control of iron stores depend on variation in absorption rather than excretion. Absorption occurs through aspiration, ingestion and burned skin.
- Hepatic damage may progress to failure with hypoprothrombinaemia and hypoglycaemia. Hepatorenal syndrome may occur.
- Iron intoxication may also result in decreased cardiac output and increased cardiac pooling which subsequently produces hypotension.
- Serum iron should be analysed in symptomatic patients. Serum iron levels (2-4 hrs post-ingestion) greater that 100 ug/dL indicate poisoning with levels, in excess of 350 ug/dL, being potentially serious. Emesis or lavage (for obtunded patients with no gag reflex) are the usual means of decontamination.
- Activated charcoal does not effectively bind iron.
- Catharsis (using sodium sulfate or magnesium sulfate) may only be used if the patient already has diarrhoea.
- Deferoxamine is a specific chelator of ferric (3+) iron and is currently the antidote of choice. It should be administered parenterally. [Ellenhorn and Barceloux: Medical Toxicology]

For acute or short term repeated exposures to dichromates and chromates:

- Absorption occurs from the alimentary tract and lungs
- The kidney excretes about 60% of absorbed chromate within 8 hours of ingestion. Urinary excretion may take up to 14 days.
- Establish airway, breathing and circulation. Assist ventilation
- Induce emesis with Ipecac Syrup if patient is not convulsing, in coma or obtunded and if the gag reflex is present.
- Otherwise use gastric lavage with endotracheal intubation.
- Fluid balance is critical. Peritoneal dialysis, haemodialysis or exchange transfusion may be effective although available data is limited.
- British Anti-Lewisite, ascorbic acid, folic acid and EDTA are probably not effective.
- There are no antidotes
- Primary irritation, including chrome ulceration, may be treated with ointments comprising calcium-sodium-EDTA. This, together with the use of frequently renewed dressings, will ensure rapid healing of any ulcer which may develop.

The mechanism of action involves the reduction of Cr (VI) to Cr(III) and subsequent chelation; the irritant effect of Cr(III)/ protein complexes is thus avoided. IILO Encyclopedial

[Ellenhorn and Barceloux: Medical Toxicology]

- Manifestation of aluminium toxicity include hypercalcaemia, anaemia, Vitamin D refractory osteodystrophy and a progressive encephalopathy (mixed dysarthria-apraxia of speech, asterixis, tremulousness, myoclonus, dementia, focal seizures). Bone pain, pathological fractures and proximal myopathy can occur,
- Symptoms usually develop insidiously over months to years (in chronic renal failure patients) unless dietary aluminium loads are excessive.
- Serum aluminium levels above 60 ug/ml indicate increased absorption. Potential toxicity occurs above 100 ug/ml and clinical symptoms are present when levels exceed 200 ug/ml.
- ▶ Deferoxamine has been used to treat dialysis encephalopathy and osteomalacia. CaNa2EDTA is less effective in chelating aluminium.

[Ellenhorn and Barceloux: Medical Toxicology]

For acute or short-term repeated exposures to highly alkaline materials:

- Respiratory stress is uncommon but present occasionally because of soft tissue edema.
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary
- Oxygen is given as indicated.
- The presence of shock suggests perforation and mandates an intravenous line and fluid administration.
- Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue.

Alkalis continue to cause damage after exposure.

INGESTION:

- Milk and water are the preferred diluents
- No more than 2 glasses of water should be given to an adult.
- ▶ Neutralising agents should never be given since exothermic heat reaction may compound injury.
- \* Catharsis and emesis are absolutely contra-indicated.
- \* Activated charcoal does not absorb alkali.
- \* Gastric lavage should not be used.

Supportive care involves the following:

- Withhold oral feedings initially.
- If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.
- ▶ Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention
- Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).

SKIN AND EYE:

Injury should be irrigated for 20-30 minutes.

Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

## **SECTION 5 Fire-fighting measures**

## Extinguishing media

- There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

## Special hazards arising from the substrate or mixture

Fire Incompatibility

None known.

## Special protective equipment and precautions for fire-fighters

- When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles
- Fire Fighting
- When heated to extreme temperatures, (>1700 deg.C) amorphous silica can fuse.

Version No: 9.11 Page 4 of 13 Issue Date: 05/12/2023 Print Date: 05/12/2023

#### APOC ROOFSLOPE DP

Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. ▶ Prevent, by any means available, spillage from entering drains or water courses. Under certain conditions the material may become combustible because of the ease of ignition which occurs after the material reaches a high specific area ratio (thin sections, fine particles, or molten states). However, the same material in massive solid form is comparatively difficult to ignite. Nearly all metals will burn in air under certain conditions. When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles. ▶ When heated to extreme temperatures, (>1700 deg.C) amorphous silica can fuse. Fire/Explosion Hazard Decomposition may produce toxic fumes of: silicon dioxide (SiO2) metal oxides When aluminium oxide dust is dispersed in air, firefighters should wear protection against inhalation of dust particles, which can also contain hazardous substances from the fire absorbed on the alumina particles. May emit poisonous fumes. May emit corrosive fumes

## **SECTION 6 Accidental release measures**

## Personal precautions, protective equipment and emergency procedures

See section 8

## **Environmental precautions**

See section 12

## Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Clean up waste regularly and abnormal spills immediately.</li> <li>Avoid breathing dust and contact with skin and eyes.</li> <li>Wear protective clothing, gloves, safety glasses and dust respirator.</li> </ul>
Major Spills	<ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear full body protective clothing with breathing apparatus.</li> </ul>

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## **SECTION 7 Handling and storage**

Precautions for safe handling	
Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> </ul>
Other information	Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes.

## Con

onditions for safe storage, in	cluding any incompatibilities
Suitable container	<ul> <li>Polyethylene or polypropylene container.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	Derivative of electropositive metal. For aluminas (aluminium oxide): Incompatible with hot chlorinated rubber. In the presence of chlorine trifluoride may react violently and igniteMay initiate explosive polymerisation of olefin oxides including ethylene oxide. Calcium oxide:  * reacts violently with water, evolving high quantities of heat  * reacts violently, with possible ignition or explosion, with acids, anilinium perchlorate, bromine pentafluoride, chlorine trifluoride, fluorine, hydrogen fluoride, hydrazine, hydrogen sulfide, hydrogen trisulfide, isopropyl isocyanide dichloride, light metals, lithium, magnesium, powdered aluminium, phosphorus, potassium, sulfur trioxide  * increase the explosive sensitivity of azides, nitroalkanes (e.g. nitroethane, nitromethane, 1-nitropropane etc.)  * is incompatible with boric acid, boron trifluoride, carbon dioxide, ethanol, halogens (such as fluorine), metal halides, phosphorus pentoxide, selenium oxychloride, sulfur dioxide and many organic materials  * Calcium sulfate:  * reacts violently with reducing agents, acrolein, alcohols, chlorine trifluoride, diazomethane, ethers, fluorine, hydrazine, hydrazinium perchlorate, hydrogen peroxide, finely divided aluminium or magnesium, peroxyfuroic acid, red phosphorus, sodium acetylide  * sensitises most organic azides which are unstable shock- and heat-sensitive explosives  * may form explosive materials with 1,3-di(5-tetrazoly)ltriazene  * is incompatible with glycidol, isopropyl chlorocarbonate, nitrosyl perchlorate, sodium borohydride  * is hygroscopic; reacts with water to form gypsum and Plaster of Paris  * For iron oxide (ferric oxide):  * Avoid storage with aluminium, calcium hypochlorite and ethylene oxide.  * Risk of explosion occurs following reaction with powdered aluminium, calcium silicide, ethylene oxide (polymerises), carbon monoxide, magnesium and perchlorates.

heat), hydrogen sulfide, hydrogen peroxide (decomposes).

Risk of ignition or formation of flammable gases or vapours occurs following reaction with carbides, for example caesium carbide, (produces

Version No: 9.11 Page 5 of 13 Issue Date: 05/12/2023

#### APOC ROOFSLOPE DP

Print Date: 05/12/2023

The substance may be or contains a "metalloid"

The following elements are considered to be metalloids; boron,silicon, germanium, arsenic, antimony, tellurium and (possibly) polonium. The electronegativities and ionisation energies of the metalloids are between those of the metals and nonmetals, so the metalloids exhibit characteristics of both classes. The reactivity of the metalloids depends on the element with which they are reacting. For example, boron acts as a nonmetal when reacting with sodium yet as a metal when reacting with fluorine.

- WARNING: Avoid or control reaction with peroxides. All transition metal peroxides should be considered as potentially explosive. For example transition metal complexes of alkyl hydroperoxides may decompose explosively.
- ▶ Metals and their oxides or salts may react violently with chlorine trifluoride and bromine trifluoride.
- These trifluorides are hypergolic oxidisers. They ignite on contact (without external source of heat or ignition) with recognised fuels contact with these materials, following an ambient or slightly elevated temperature, is often violent and may produce ignition.

#### Silicas:

- react with hydrofluoric acid to produce silicon tetrafluoride gas
- react with xenon hexafluoride to produce explosive xenon trioxide
- reacts exothermically with oxygen difluoride, and explosively with chlorine trifluoride (these halogenated materials are not commonplace industrial materials) and other fluorine-containing compounds
- ► may react with fluorine, chlorates
- are incompatible with strong oxidisers, manganese trioxide, chlorine trioxide, strong alkalis, metal oxides, concentrated orthophosphoric acid, vinyl acetate
- may react vigorously when heated with alkali carbonates.
- Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.
- Avoid contact with copper, aluminium and their alloys.

## **SECTION 8 Exposure controls / personal protection**

## **Control parameters**

#### Occupational Exposure Limits (OEL)

#### **INGREDIENT DATA**

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
				1		140100
US OSHA Permissible Exposure Limits (PELs) Table Z-1	silica crystalline - quartz	Quartz - respirable	0.05 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	silica crystalline - quartz	Silica: Crystalline: Quartz (Respirable)	10 (%SiO2+2) mg/m3 / 250 (%SiO2+5) mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	silica crystalline - quartz	Silica, crystalline (as respirable dust)	0.05 mg/m3	Not Available	Not Available	Ca; See Appendix A
US OSHA Permissible Exposure Limits (PELs) Table Z-1	portland cement	Portland cement- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	portland cement	Portland cement- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	portland cement	Silicates (less than 1% crystalline silica): Portland cement	50 mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	portland cement	Portland cement - respirable	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	portland cement	Portland cement - total	10 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	gypsum	Calcium sulfate- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	gypsum	Gypsum- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	gypsum	Gypsum- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	gypsum	Calcium sulfate- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	gypsum	Gypsum - respirable	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	gypsum	Calcium sulfate - total	10 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	gypsum	Calcium sulfate - respirable	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	gypsum	Gypsum - total	10 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	limestone	Calcium Carbonate- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	limestone	Calcium Carbonate- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	limestone	Limestone- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	limestone	Marble- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	limestone	Marble- Total dust	15 mg/m3	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-1	limestone	Limestone- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available

Version No: 9.11 Issue Date: 05/12/2023 Page 6 of 13 Print Date: 05/12/2023

#### APOC ROOFSLOPE DP

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Limits (PELs) Table Z-3	limestone	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
US OSHA Permissible Exposure Limits (PELs) Table Z-3	limestone	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	limestone	Limestone - respirable	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	limestone	Calcium carbonate - total	10 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	limestone	Marble - total	10 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	limestone	Calcium carbonate - total	10 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	limestone	Marble - respirable	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	limestone	Calcium carbonate - respirable	5 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	limestone	Limestone - total	10 mg/m3	Not Available	Not Available	Not Available
US NIOSH Recommended Exposure Limits (RELs)	limestone	Calcium carbonate - respirable	5 mg/m3	Not Available	Not Available	Not Available

#### Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
silica crystalline - quartz	0.075 mg/m3	33 mg/m3	200 mg/m3
limestone	45 mg/m3	210 mg/m3	1,300 mg/m3

Ingredient	Original IDLH	Revised IDLH
silica crystalline - quartz	25 mg/m3 / 50 mg/m3	Not Available
portland cement	5,000 mg/m3	Not Available
gypsum	Not Available	Not Available
limestone	Not Available	Not Available
blast furnace slag	Not Available	Not Available

## **Exposure controls**

#### Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Individual protection measures, such as personal protective equipment













## Eye and face protection

Hands/feet protection

- Safety glasses with side shields.
- Chemical goggles.
- ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

## Skin protection

## See Hand protection below

## NOTE:

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when

making a final choice. ▶ Neoprene rubber gloves

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene.
- nitrile rubber.

## **Body protection**

## See Other protection below

Figure 2 Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent]

## Other protection

Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges. A respirator affording higher levels of protection may be substituted.

Version No: 9.11 Page 7 of 13 Issue Date: 05/12/2023

## APOC ROOFSLOPE DP

Print Date: **05/12/2023** 

- Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood.
- Overalls.
- P.V.C apron.
- Barrier cream.

## Respiratory protection

Type -P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

If inhalation risk above the TLV exists, wear approved dust respirator.

Use respirators with protection factors appropriate for the exposure level.

- ▶ Up to 5 X TLV, use valveless mask type; up to 10 X TLV, use 1/2 mask dust respirator
- ▶ Up to 50 X TLV, use full face dust respirator or demand type C air supplied respirator
- ▶ Up to 500 X TLV, use powered air-purifying dust respirator or a Type C pressure demand supplied-air respirator
- Over 500 X TLV wear full-face self-contained breathing apparatus with positive pressure mode or a combination respirator with a Type C positive pressure supplied-air full-face respirator and an auxiliary self-contained breathing apparatus operated in pressure demand or other positive pressure mode
- · Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- · Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- · Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- · Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- · Use approved positive flow mask if significant quantities of dust becomes airborne.
- · Try to avoid creating dust conditions.

Where significant concentrations of the material are likely to enter the breathing zone, a Class P3 respirator may be required.

Class P3 particulate filters are used for protection against highly toxic or highly irritant particulates.

Filtration rate: Filters at least 99.95% of airborne particles

Suitable for:

- · Relatively small particles generated by mechanical processes eg. grinding, cutting, sanding, drilling, sawing.
- · Sub-micron thermally generated particles e.g. welding fumes, fertilizer and bushfire smoke.
- · Biologically active airborne particles under specified infection control applications e.g. viruses, bacteria, COVID-19, SARS
- · Highly toxic particles e.g. Organophosphate Insecticides, Radionuclides, Asbestos

Note: P3 Rating can only be achieved when used with a Full Face Respirator or Powered Air-Purifying Respirator (PAPR). If used with any other respirator, it will only provide filtration protection up to a P2 rating.

## **SECTION 9 Physical and chemical properties**

## Information on basic physical and chemical properties

Appearance	Light sensitive.		
Physical state	Divided Solid Powder	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

## **SECTION 10 Stability and reactivity**

Reactivity	See section 7
------------	---------------

Version No: 9.11 Page 8 of 13 Issue Date: 05/12/2023 Print Date: 05/12/2023

## APOC ROOFSLOPE DP

Unstable in the presence of incompatible materials. Chemical stability Product is considered stable ▶ Hazardous polymerisation will not occur. Possibility of hazardous See section 7 reactions Conditions to avoid See section 7 Incompatible materials See section 7 Hazardous decomposition See section 5 products

## **SECTION 11 Toxicological information**

#### Information on toxicological effects

## Inhaled

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation may result in ulcers or sores of the lining of the nose (nasal mucosa), and lung damage

Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures

Effects on lungs are significantly enhanced in the presence of respirable particles.

Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual.

#### Ingestion

Chromate salts are corrosive and produce cellular damage to tissue. Ingestion may produce inflammation of the digestive tract, nausea, vomiting and abdominal pain.

The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence

Accidental ingestion of the material may be damaging to the health of the individual.

This material can cause inflammation of the skin on contact in some persons.

## The material may accentuate any pre-existing dermatitis condition

Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.

Though considered non-harmful, slight irritation may result from contact because of the abrasive nature of the aluminium oxide particles. Thus it may cause itching and skin reaction and inflammation.

## Skin Contact

Four students received severe hand burns whilst making moulds of their hands with dental plaster substituted for Plaster of Paris. The dental plaster known as "Stone" was a special form of calcium sulfate hemihydrate containing alpha-hemihydrate crystals that provide high compression strength to the moulds. Beta-hemihydrate (normal Plaster of Paris) does not cause skin burns in similar circumstances.

Handling wet cement can cause dermatitis. Cement when wet is quite alkaline and this alkali action on the skin contributes strongly to cement contact dermatitis since it may cause drying and defatting of the skin which is followed by hardening, cracking, lesions developing, possible infections of lesions and penetration by soluble salts.

Skin contact may result in severe irritation particularly to broken skin. Ulceration known as "chrome ulcers" may develop. Chrome ulcers and skin cancer are significantly related.

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

## Eye

If applied to the eyes, this material causes severe eye damage.

Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Strong evidence exists that this substance may cause irreversible mutations (though not lethal) even following a single exposure.

Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.

There is sufficient evidence to suggest that this material directly causes cancer in humans.

Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Animal testing shows long term exposure to aluminium oxides may cause lung disease and cancer, depending on the size of the particle. The smaller the size, the greater the tendencies of causing harm.

Red blood cells and rabbit alveolar macrophages exposed to calcium silicate insulation materials in vitro showed haemolysis in one study but not in another. Both studies showed the substance to be more cytotoxic than titanium dioxide but less toxic than asbestos.

In a small cohort mortality study of workers in a wollastonite quarry, the observed number of deaths from all cancers combined and lung cancer were lower than expected.

## Chronic

Cement contact dermatitis (CCD) may occur when contact shows an allergic response, which may progress to sensitisation. Sensitisation is due to soluble chromates (chromate compounds) present in trace amounts in some cements and cement products. Soluble chromates readily penetrate intact skin.

Crystalline silicas activate the inflammatory response of white blood cells after they injure the lung epithelium. Chronic exposure to crystalline silicas reduces lung capacity and predisposes to chest infections.

Amorphous silicas generally are less hazardous than crystalline silicas, but the former can be converted to the latter on heating and subsequent cooling. Inhalation of dusts containing crystalline silicas may lead to silicosis, a disabling lung disease that may take years to develop Soluble silicates do not exhibit sensitizing potential. Testing in bacterial and animal experiments have not shown any evidence of them causing mutations or birth defects.

Overexposure to the breathable dust may cause coughing, wheezing, difficulty in breathing and impaired lung function. Chronic symptoms may include decreased vital lung capacity and chest infections. Repeated exposures in the workplace to high levels of fine-divided dusts may produce a condition known as pneumoconiosis, which is the lodgement of any inhaled dusts in the lung, irrespective of the effect.

Chronic excessive intake of iron have been associated with damage to the liver and pancreas. People with a genetic disposition to poor control over iron are at an increased risk.

Chromium (III) is an essential trace mineral. Chronic exposure to chromium (III) irritates the airways, malnourishes the liver and kidneys, causes fluid in the lungs, and adverse effects on white blood cells, and also increases the risk of developing lung cancer.

## APOC ROOFSLOPE DP

TOXICITY

IRRITATION

Version No: 9.11 Page 9 of 13

## APOC ROOFSLOPE DP

Issue Date: 05/12/2023 Print Date: 05/12/2023

	Not Available	Not Available	
	TOXICITY	IRRITATION	
silica crystalline - quartz	Oral (Rat) LD50: 500 mg/kg <sup>[2]</sup>	Not Available	
	TOXICITY	IRRITATION	
portland cement	Not Available	Not Available	
	TOXICITY	IRRITATION	
gypsum	Inhalation(Rat) LC50: >3.26 mg/l4h <sup>[1]</sup>	Not Available	
	Oral (Rat) LD50: >1581 mg/kg <sup>[1]</sup>		
	TOXICITY	IRRITATION	
	Oral (Rat) LD50: 6450 mg/kg <sup>[2]</sup>	-	effect observed (not irritating) <sup>[1]</sup>
limestone	Crar (Nai) 2500. 0400 mg/kg		0 mg/24h-moderate
			e effect observed (not irritating) <sup>[1]</sup>
	TOWICITY	IDDITATION	
	TOXICITY	IRRITATION	#
blast furnace slag	dermal (rat) LD50: >4000 mg/kg <sup>[1]</sup>	,	effect observed (not irritating) <sup>[1]</sup>
	Inhalation(Rat) LC50: >5.235 mg/L4h <sup>[1]</sup>	Skin: no adverse	e effect observed (not irritating)[1]
	Oral (Rat) LD50: >2000 mg/kg <sup>[1]</sup>		
Legend:	Nalue obtained from Europe ECHA Registered Sub- specified data extracted from RTECS - Register of To.		ined from manufacturer's SDS. Unless otherwise
	Laboratory (in vitro) and animal studies show, exposu	re to the material may result in a noss	ible risk of irreversible effects with the possibility of
APOC ROOFSLOPE DP	producing mutation.	e to the material may result in a poss	ible flak of inteversible effects, with the possibility of
	WARNING: For inhalation exposure ONLY: This substance The International Agency for Research on Cancer (IAI	RC) has classified occupational expos	sures to <b>respirable</b> (<5 um) crystalline silica as bein
SILICA CRYSTALLINE - QUARTZ	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum* Millions of particles per cubic foot (based on impinge	RC) has classified occupational exposon what IARC considered sufficient evertz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turer samples counted by light field technic	sures to <b>respirable</b> (<5 um) crystalline silica as bein idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.
	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum	RC) has classified occupational exposon what IARC considered sufficient evertz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turer samples counted by light field technitermines whether it is likely to presenteye, mucous membranes, and airwayays diseases.	sures to <b>respirable</b> (<5 um) crystalline silica as bein ridence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.  iques). t a chronic health problem.
QUARTZ	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum * Millions of particles per cubic foot (based on impinge NOTE: the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwa Repeat dose toxicity: Examination of workers at a gyp	RC) has classified occupational exposon what IARC considered sufficient eventz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver ture a samples counted by light field technotermines whether it is likely to present eye, mucous membranes, and airway anys diseases. Is sum manufacturing plant found restriction properties. No evidence of mutage causing pronounced inflammation. Research	sures to <b>respirable</b> (<5 um) crystalline silica as bein idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.  iques). t a chronic health problem.  rs. A series of studies involving Gypsum industry etive defects on long-function tests in those who were nic or teratogenic effects.  speated or prolonged exposure to irritants may
QUARTZ	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum* Millions of particles per cubic foot (based on impinge NOTE: the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwer Repeat dose toxicity: Examination of workers at a gypchronically exposed to gypsum dust.  Eye (rabbit) 0.75: mg/24h - No evidence of carcinoger The material may produce severe irritation to the eye produce conjunctivitis.  The material may cause skin irritation after prolonged	RC) has classified occupational exposon what IARC considered sufficient evartz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turner samples counted by light field technitermines whether it is likely to present eye, mucous membranes, and airwayays diseases. sum manufacturing plant found restrict properties. No evidence of mutage causing pronounced inflammation. Reform repeated exposure and may producen years after exposure to the materiates) which can occur after exposure to trevious airways disease in a non-atop	sures to respirable (<5 um) crystalline silica as being idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.  iques).  t a chronic health problem.  Is. A series of studies involving Gypsum industry betive defects on long-function tests in those who were nic or teratogenic effects.  Expeated or prolonged exposure to irritants may concern contact skin redness, swelling, the production all ends. This may be due to a non-allergic condition to high levels of highly irritating compound. Main
GYPSUM  LIMESTONE  APOC ROOFSLOPE DP & PORTLAND CEMENT & GYPSUM & BLAST FURNACE	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease. Intermittent exposure produces; focal fibrosis, (pneum* Millions of particles per cubic foot (based on impinge NOTE: the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwa Repeat dose toxicity: Examination of workers at a gypchronically exposed to gypsum dust.  Eye (rabbit) 0.75: mg/24h - No evidence of carcinoger The material may produce severe irritation to the eye produce conjunctivitis. The material may cause skin irritation after prolonged vesicles, scaling and thickening of the skin.  Asthma-like symptoms may continue for months or evenown as reactive airways dysfunction syndrome (RA criteria for diagnosing RADS include the absence of particular discounts of the stinum of the product of the stinum of the product of t	RC) has classified occupational exposon what IARC considered sufficient eventz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turn as ramples counted by light field technic termines whether it is likely to present eye, mucous membranes, and airway anys diseases. It is summanufacturing plant found restrict properties. No evidence of mutage causing pronounced inflammation. Resort repeated exposure and may produce the exposure to the material DS) which can occur after exposure to the crevious airways disease in a non-atop cumented exposure to the irritant.	sures to respirable (<5 um) crystalline silica as bein idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.  iques).  t a chronic health problem.  In a chronic health problem.  In a chronic health problem industry stive defects on long-function tests in those who were the concentration of the production of the production all ends. This may be due to a non-allergic condition of high levels of highly irritating compound. Main bic individual, with sudden onset of persistent this product.
GYPSUM  LIMESTONE  APOC ROOFSLOPE DP & PORTLAND CEMENT & GYPSUM & BLAST FURNACE SLAG  APOC ROOFSLOPE DP &	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum* Millions of particles per cubic foot (based on impinge NOTE : the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwa Repeat dose toxicity: Examination of workers at a gypchronically exposed to gypsum dust.  Eye (rabbit) 0.75: mg/24h - No evidence of carcinoger The material may produce severe irritation to the eye produce conjunctivitis.  The material may cause skin irritation after prolonged vesicles, scaling and thickening of the skin.  Asthma-like symptoms may continue for months or evenown as reactive airways dysfunction syndrome (RA criteria for diagnosing RADS include the absence of p asthma-like symptoms within minutes to hours of a do The following information refers to contact allergens a Contact allergies quickly manifest themselves as contact allergies accontact allergens accontact allergies quickly manifest themselves as contact allergies accontact allergies accontact allergies quickly manifest themselves as contact allergies quickly manifest themsel	RC) has classified occupational exposon what IARC considered sufficient evartz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turn occoniosis, cough, dyspnoea, liver turn occoniosis, cough, dyspnoea, liver turn occoniosis, cough, dyspnoea, and airway and diseases.  Sum manufacturing plant found restrict properties. No evidence of mutage causing pronounced inflammation. Resort repeated exposure and may produce or repeated exposure to the materia DS) which can occur after exposure to the irritant.  Sum a group and may not be specific to the cast eczema, more rarely as urticaria of the delayed type.  Sum of 1000 mg/kg/d.	sures to respirable (<5 um) crystalline silica as bein idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.  iques).  t a chronic health problem.  Is. A series of studies involving Gypsum industry stive defects on long-function tests in those who were nic or teratogenic effects.  Expeated or prolonged exposure to irritants may ce on contact skin redness, swelling, the production of high levels of highly irritating compound. Main pic individual, with sudden onset of persistent this product.  In Quincke's oedema. The pathogenesis of contact of the system in the system in the system in the system in the pathogenesis of contact of the system in the system i
GYPSUM  LIMESTONE  APOC ROOFSLOPE DP & PORTLAND CEMENT & SLAG  APOC ROOFSLOPE DP & PORTLAND CEMENT  APOC ROOFSLOPE DP & PORTLAND CEMENT	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum* Millions of particles per cubic foot (based on impinge NOTE: the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwer Repeat dose toxicity: Examination of workers at a gypchronically exposed to gypsum dust.  Eye (rabbit) 0.75: mg/24h - No evidence of carcinoger The material may produce severe irritation to the eye produce conjunctivitis.  The material may cause skin irritation after prolonged vesicles, scaling and thickening of the skin.  Asthma-like symptoms may continue for months or evenown as reactive airways dysfunction syndrome (RA criteria for diagnosing RADS include the absence of pasthma-like symptoms within minutes to hours of a do The following information refers to contact allergens a Contact allergies quickly manifest themselves as contect allergies quickly manifest themselves as contected involves a cell-mediated (T lymphocytes) imm For silica amorphous: Derived No Adverse Effects Level (NOAEL) in the ran In humans, synthetic amorphous silica (SAS) is essent evidence of adverse health effects due to SAS. Reped drying/cracking of the skin.	RC) has classified occupational exposon what IARC considered sufficient evertz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turn the samples counted by light field technotermines whether it is likely to present eye, mucous membranes, and airway anys diseases. It is sufficient found restrict properties. No evidence of mutage causing pronounced inflammation. Resort repeated exposure and may produce the properties of the material points of the properties of the material points. It is a group and may not be specific to the act eczema, more rarely as urticaria of the delayed type.  The properties of the delayed type.  The properties of the delayed type of 1000 mg/kg/d. The protection of the delayed type of the protection of the delayed type of the protection of the delayed type of the protection of the delayed type.	sures to respirable (<5 um) crystalline silica as being idence from epidemiological studies of humans for solven also known to cause silicosis, a non-cancerous lumours.  Industry to a chronic health problem.  Industry the defects on long-function tests in those who were the defects on long-function tests in those who were the defects on prolonged exposure to irritants may be due to a non-allergic condition on high levels of highly irritating compound. Main pic individual, with sudden onset of persistent this product.  In Quincke's oedema. The pathogenesis of contact of the system in the system in the system in the system in the pathogenesis of contact in the pathogenesis of contact in the system in the system in the pathogenesis of contact in the system in the system in the pathogenesis of contact in the system in the pathogenesis of contact in the system in
GYPSUM  LIMESTONE  APOC ROOFSLOPE DP & PORTLAND CEMENT & SLAG  APOC ROOFSLOPE DP & PORTLAND CEMENT  APOC ROOFSLOPE DP & PORTLAND CEMENT  APOC ROOFSLOPE DP & BLAST FURNACE SLAG	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum* Millions of particles per cubic foot (based on impinge NOTE: the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwe Repeat dose toxicity: Examination of workers at a gypchronically exposed to gypsum dust.  Eye (rabbit) 0.75: mg/24h - No evidence of carcinoger The material may produce severe irritation to the eye produce conjunctivitis.  The material may cause skin irritation after prolonged vesicles, scaling and thickening of the skin.  Asthma-like symptoms may continue for months or evenown as reactive airways dysfunction syndrome (RA criteria for diagnosing RADS include the absence of pasthma-like symptoms within minutes to hours of a do The following information refers to contact allergens a Contact allergies quickly manifest themselves as contact allergies quickly manifest themselves as conteczema involves a cell-mediated (T lymphocytes) imm.  For silica amorphous:  Derived No Adverse Effects Level (NOAEL) in the ran In humans, synthetic amorphous silica (SAS) is essential evidence of adverse health effects due to SAS. Repeating/cracking of the skin.  When experimental animals inhale synthetic amorpho	RC) has classified occupational exposon what IARC considered sufficient evertz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turn the samples counted by light field technotermines whether it is likely to present eye, mucous membranes, and airway anys diseases. It is sufficient found restrict properties. No evidence of mutage causing pronounced inflammation. Resort repeated exposure and may produce the properties of the material points of the properties of the material points. It is a group and may not be specific to the act eczema, more rarely as urticaria of the delayed type.  The properties of the delayed type.  The properties of the delayed type of 1000 mg/kg/d. The protection of the delayed type of the protection of the delayed type of the protection of the delayed type of the protection of the delayed type.	sures to respirable (<5 um) crystalline silica as being idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lur mours.  iques).  t a chronic health problem.  Is. A series of studies involving Gypsum industry stive defects on long-function tests in those who were nic or teratogenic effects.  Expeated or prolonged exposure to irritants may ce on contact skin redness, swelling, the production of high levels of highly irritating compound. Main pic individual, with sudden onset of persistent this product.  In Quincke's oedema. The pathogenesis of contact of the system of the eye and the cition
GYPSUM  LIMESTONE  APOC ROOFSLOPE DP & PORTLAND CEMENT & GYPSUM & BLAST FURNACE SLAG  APOC ROOFSLOPE DP & PORTLAND CEMENT  APOC ROOFSLOPE DP & BLAST FURNACE SLAG  PORTLAND CEMENT & GYPSUM & BLAST FURNACE SLAG	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum* Millions of particles per cubic foot (based on impinge NOTE : the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwa Repeat dose toxicity: Examination of workers at a gypchronically exposed to gypsum dust.  Eye (rabbit) 0.75: mg/24h - No evidence of carcinoger The material may produce severe irritation to the eye produce conjunctivitis.  The material may cause skin irritation after prolonged vesicles, scaling and thickening of the skin.  Asthma-like symptoms may continue for months or evenown as reactive airways dysfunction syndrome (RA criteria for diagnosing RADS include the absence of pasthma-like symptoms within minutes to hours of a do The following information refers to contact allergens a Contact allergies quickly manifest themselves as conteczema involves a cell-mediated (T lymphocytes) imm For silica amorphous:  Derived No Adverse Effects Level (NOAEL) in the ran In humans, synthetic amorphous silica (SAS) is essential experimental animals inhale synthetic amorphous No significant acute toxicological data identified in literations.	RC) has classified occupational exposon what IARC considered sufficient eventz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turn occoniosis, cough, dyspnoea, liver turn occoniosis, cough, dyspnoea, liver turn occoniosis, and airway and seases.  In properties. No evidence of mutage causing pronounced inflammation. Recor repeated exposure and may produce or repeated exposure to the material DS) which can occur after exposure to revious airways disease in a non-atopicumented exposure to the irritant.  In a group and may not be specific to the control of the delayed type.  In ge of 1000 mg/kg/d.  Italially non-toxic by mouth, skin or eyes atted exposure (without personal protein occur in the cough of the cough of the cough of the delayed in the cough of the cough o	sures to respirable (<5 um) crystalline silica as bein idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.  iques).  It a chronic health problem.  It a chronic
GYPSUM  LIMESTONE  APOC ROOFSLOPE DP & PORTLAND CEMENT & SLAG  APOC ROOFSLOPE DP & PORTLAND CEMENT  APOC ROOFSLOPE DP & BLAST FURNACE SLAG  PORTLAND CEMENT & SYPSUM & BLAST FURNACE SLAG  Acute Toxicity	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum* Millions of particles per cubic foot (based on impinge NOTE : the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwa Repeat dose toxicity: Examination of workers at a gypchronically exposed to gypsum dust.  Eye (rabbit) 0.75: mg/24h - No evidence of carcinoger The material may produce severe irritation to the eye produce conjunctivitis.  The material may cause skin irritation after prolonged vesicles, scaling and thickening of the skin.  Asthma-like symptoms may continue for months or evenown as reactive airways dysfunction syndrome (RA criteria for diagnosing RADS include the absence of pasthma-like symptoms within minutes to hours of a do The following information refers to contact allergens a Contact allergies quickly manifest themselves as conteczema involves a cell-mediated (T lymphocytes) imm* For silica amorphous:  Derived No Adverse Effects Level (NOAEL) in the ran In humans, synthetic amorphous silica (SAS) is essent evidence of adverse health effects due to SAS. Repeating and the skin.  When experimental animals inhale synthetic amorpho	RC) has classified occupational exposon what IARC considered sufficient eventz and cristobalite. Crystalline silica i occoniosis), cough, dyspnoea, liver turn of samples counted by light field technic termines whether it is likely to present eye, mucous membranes, and airway also diseases. It is properties. No evidence of mutage causing pronounced inflammation. Reform repeated exposure and may produce or repeated exposure to the material DS) which can occur after exposure to trevious airways disease in a non-atop cumented exposure to the irritant. It is a group and may not be specific to the act eczema, more rarely as urticaria on the counterpolation of the delayed type.  The properties of the delayed type of 1000 mg/kg/d. It is the counterpolation of the delayed type in the cast exposure (without personal proteins silica (SAS) dust, it dissolves in the cature search.  Carcinogenicity	sures to respirable (<5 um) crystalline silica as bein idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.  iques). It a chronic health problem. It a chronic healt
GYPSUM  LIMESTONE  APOC ROOFSLOPE DP & PORTLAND CEMENT & SLAG  APOC ROOFSLOPE DP & PORTLAND CEMENT  APOC ROOFSLOPE DP & PORTLAND CEMENT  APOC ROOFSLOPE DP & BLAST FURNACE SLAG  PORTLAND CEMENT & SLAG  ACUTE TOXICITY  Skin Irritation/Corrosion	The International Agency for Research on Cancer (IAI carcinogenic to humans . This classification is based of the carcinogenicity of inhaled silica in the forms of quadisease.  Intermittent exposure produces; focal fibrosis, (pneum * Millions of particles per cubic foot (based on impinge NOTE : the physical nature of quartz in the product de Gypsum (calcium sulfate dehydrate) irritates the skin, workers in Poland reported chronic, non-specific airwe Repeat dose toxicity: Examination of workers at a gypchronically exposed to gypsum dust.  Eye (rabbit) 0.75: mg/24h - No evidence of carcinoger The material may produce severe irritation to the eye produce conjunctivitis.  The material may cause skin irritation after prolonged vesicles, scaling and thickening of the skin.  Asthma-like symptoms may continue for months or evknown as reactive airways dysfunction syndrome (RA criteria for diagnosing RADS include the absence of p asthma-like symptoms within minutes to hours of a do The following information refers to contact allergens a Contact allergies quickly manifest themselves as cont eczema involves a cell-mediated (T lymphocytes) imm  For silica amorphous:  Derived No Adverse Effects Level (NOAEL) in the ran In humans, synthetic amorphous silica (SAS) is essen evidence of adverse health effects due to SAS. Repeating/cracking of the skin.  When experimental animals inhale synthetic amorpho	RC) has classified occupational exposon what IARC considered sufficient ever the content of the	sures to respirable (<5 um) crystalline silica as bein idence from epidemiological studies of humans for s also known to cause silicosis, a non-cancerous lumours.  iques).  t a chronic health problem.  rs. A series of studies involving Gypsum industry stive defects on long-function tests in those who were nic or teratogenic effects.  expeated or prolonged exposure to irritants may ce on contact skin redness, swelling, the production of high levels of highly irritating compound. Main pic individual, with sudden onset of persistent this product.  In Quincke's oedema. The pathogenesis of contact of Quincke's oedema. The pathogenesis of the eye and the lung fluid and is rapidly eliminated.

Version No: 9.11 Page 10 of 13 Issue Date: 05/12/2023

## APOC ROOFSLOPE DP

Print Date: 05/12/2023

## **SECTION 12 Ecological information**

## **Toxicity**

	Endpoint	Test Duration (hr)	Species	Value	Source
APOC ROOFSLOPE DP	Not Available	Not Available	Not Available	Not Available	Not Availabl
silica crystalline - quartz	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Source
portland cement	Not Available	Not Available	Not Available	Not Available	Not Availabl
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	>79mg/l	2
gypsum	LC50	96h	Fish >79mg/l		2
	NOEC(ECx)	0.25h	Fish	75mg/l	4
	EC50	96h	Algae or other aquatic plants	3200mg/I	4
	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	1h	Fish	4-320mg/l	4
limestone	LC50	96h	Fish	>165200mg/L	4
	EC50	72h	Algae or other aquatic plants	>14mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	72h	Algae or other aquatic plants	>=100mg/l	2
blast furnace slag	EC50	72h	Algae or other aquatic plants	>100mg/l	2
	LC50	96h	Fish	>100000mg/L	2
	EC50	48h	Crustacea	>100mg/l	2
Legend:	Ecotox databas		CHA Registered Substances - Ecotoxicological Informa Aquatic Hazard Assessment Data 6. NITE (Japan) - E		

## For Metal:

Atmospheric Fate - Metal-containing inorganic substances generally have negligible vapour pressure and are not expected to partition to air.

Environmental Fate: Environmental processes, such as oxidation, the presence of acids or bases and microbiological processes, may transform insoluble metals to more soluble ionic forms. Environmental processes may enhance bioavailability and may also be important in changing solubilities.

For Chromium: Chromium is poorly absorbed by cells found in microorganisms, plants and animals. Hexavalent chromate anions are readily transported into cells and toxicity is closely linked to the higher oxidation state.

Ecotoxicity - Toxicity in Aquatic Organisms: Chromium is harmful to aquatic organisms in very low concentrations.

For chromium:

Aquatic Fate - Most chromium released into water will be deposited in the sediment. A small percentage of chromium can be found in soluble and insoluble forms with soluble chromium making up a very small percentage of the total chromium. Most of the soluble chromium is present as chromium (VI) and soluble chromium (III) complexes.

For Amorphous Silica: Amorphous silica is chemically and biologically inert. It is not biodegradable.

Aquatic Fate: Due to its insolubility in water there is a separation at every filtration and sedimentation process.

For Silica:

Environmental Fate: Most documentation on the fate of silica in the environment concerns dissolved silica, in the aquatic environment, regardless of origin, (man-made or natural), or structure, (crystalline or amorphous).

Terrestrial Fate: Silicon makes up 25.7% of the Earth's crust, by weight, and is the second most abundant element, being exceeded only by oxygen. Silicon is not found free in nature, but occurs chiefly as the oxide and as silicates.

DO NOT discharge into sewer or waterways.

## Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
gypsum	HIGH	HIGH

## **Bioaccumulative potential**

Ingredient	Bioaccumulation
gypsum	LOW (LogKOW = -2.2002)

## Mobility in soil

Ingredient	Mobility
gypsum	LOW (KOC = 6.124)

## **SECTION 13 Disposal considerations**

Version No: 9.11 Issue Date: 05/12/2023 Page 11 of 13

#### APOC ROOFSLOPE DP

Print Date: 05/12/2023

#### Containers may still present a chemical hazard/ danger when empty.

▶ Return to supplier for reuse/ recycling if possible.

#### Otherwise

Fill fromtainer can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their

area. In some areas, certain wastes must be tracked.

- DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Bury residue in an authorised landfill.

## **SECTION 14 Transport information**

Product / Packaging disposal

#### Labels Required

**Marine Pollutant** 

NO

Shipping container and transport vehicle placarding and labeling may vary from the below information. Products that are regulated for transport will be packaged and marked as Dangerous Goods in Excepted Quantities according to US DOT, IATA and IMDG regulations. In case of reshipment, it is the responsibility of the shipper to determine the appropriate labels and markings in accordance with applicable transport regulations

Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

#### Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
silica crystalline - quartz	Not Available
portland cement	Not Available
gypsum	Not Available
limestone	Not Available
blast furnace slag	Not Available

## Transport in bulk in accordance with the IGC Code

Product name	Ship Type	
silica crystalline - quartz	Not Available	
portland cement	Not Available	
gypsum	Not Available	
limestone	Not Available	
blast furnace slag	Not Available	

## **SECTION 15 Regulatory information**

## Safety, health and environmental regulations / legislation specific for the substance or mixture

## silica crystalline - quartz is found on the following regulatory lists Chemical Footprint Project - Chemicals of High Concern List International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans US - California Proposition 65 - Carcinogens List

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65

US - Massachusetts - Right To Know Listed Chemicals US DOE Temporary Emergency Exposure Limits (TEELs)

portland cement is found on the following regulatory lists

US - Massachusetts - Right To Know Listed Chemicals US NIOSH Recommended Exposure Limits (RELs) US OSHA Permissible Exposure Limits (PELs) Table Z-1

gypsum is found on the following regulatory lists

US - Massachusetts - Right To Know Listed Chemicals

US NIOSH Recommended Exposure Limits (RELs) limestone is found on the following regulatory lists US National Toxicology Program (NTP) 15th Report Part A Known to be Human Carcinogens

US NIOSH Carcinogen List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Carcinogens Listing

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

Version No: 9.11 Page 12 of 13 Issue Date: 05/12/2023

## APOC ROOFSLOPE DP

Print Date: 05/12/2023

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5

US - Massachusetts - Right To Know Listed Chemicals

US DOE Temporary Emergency Exposure Limits (TEELs)

## blast furnace slag is found on the following regulatory lists

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

## **Federal Regulations**

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

## Section 311/312 hazard categories

Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	Yes
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	Yes
Respiratory or Skin Sensitization	Yes
Serious eye damage or eye irritation	
Specific target organ toxicity (single or repeated exposure)	Yes
Aspiration Hazard	No
Germ cell mutagenicity	
Simple Asphyxiant	No
Hazards Not Otherwise Classified	

## US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

None Reported

## State Regulations

## US. California Proposition 65



**WARNING:** This product can expose you to chemicals including **silica crystalline - quartz**, which is known to the State of California to cause cancer. For more information, go to <a href="https://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.

## National Inventory Status

National Inventory	Status			
Australia - AIIC / Australia Non-Industrial Use	Yes			
Canada - DSL	Yes			
Canada - NDSL	No (silica crystalline - quartz; portland cement; gypsum; blast furnace slag)			
China - IECSC	No (blast furnace slag)			
Europe - EINEC / ELINCS / NLP	Yes			
Japan - ENCS	No (portland cement; blast furnace slag)			
Korea - KECI	No (blast furnace slag)			
New Zealand - NZIoC	Yes			
Philippines - PICCS	No (portland cement; blast furnace slag)			
USA - TSCA	Yes			
Taiwan - TCSI	Yes			
Mexico - INSQ	No (blast furnace slag)			
Vietnam - NCI	Yes			
Russia - FBEPH	No (blast furnace slag)			
Legend:	Yes = All CAS declared ingredients are on the inventory  No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.			

Version No: 9.11 Page 13 of 13 Issue Date: 05/12/2023 Print Date: 05/12/2023

## APOC ROOFSLOPE DP

**SECTION 16 Other information** 

Revision Date	05/12/2023
Initial Date	01/23/2020

## CONTACT POINT

\*\*PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES\*\*

## **SDS Version Summary**

Version	Date of Update	Sections Updated
8.11	05/12/2023	Toxicological information - Acute Health (swallowed), Composition / information on ingredients - Ingredients

## Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios.

Powered by AuthorITe, from Chemwatch.