

AGGREGATES

Natural Aggregates

SEPTEMBER 2023

1 / IDENTIFICATION OF SUBSTANCES

PRODUCT DESCRIPTION

Natural Aggregates include crushed rock, and all types of sand (washed and unwashed). Crushed stone and sand are the two primary sources of natural aggregate, which are used directly in construction or as a raw material for construction materials such as concrete.

2 / HAZARD IDENTIFICATION

The main health hazard from natural aggregates is airborne dust. Increased levels of dust are generated by mechanical treatment of natural aggregates, or products containing natural aggregates i.e. crushing or cutting and surface treatment of hardened concrete.

Inhalation of respirable dust over a prolonged period can be harmful to health. Where respirable dust contains high quantities of free silica in the form of quartz, there is a risk of developing silicosis. The main symptoms

Of this chronic disease are difficulty in breathing and coughing.

Failure to implement adequate control measures can also lead to an increased risk of developing lung cancer.

Natural aggregates can also cause abrasion or irritation to skin and eyes and gastrointestinal irritation if ingested.

The weight of the bagged product could pose a health hazard if inappropriate manual handling techniques are employed.

3 / COMPOSITION/INFORMATION ON INGREDIENTS

Natural aggregates are produced from naturally occurring rock or sand and gravel deposits (typically limestone, granite, basalt, Sandstone, quartzite, flint etc). These products will contain a combination of various minerals including silica.

4 / FIRST AID MEASURES

General: Unlikely to be hazardous if handled correctly

Inhalation: Remove to a dust free area and seek medical attention if breathing difficulties are experienced

Skin: Wash with soap and water. If prolonged contact causes irritation seek medical attention

Eyes: Irrigate with plenty of water and seek medical attention if soreness continues

Ingestion: Give water to drink and seek medical advice

5 / FIRE FIGHTING MEASURES

NON-FLAMMABLE

6 / ACCIDENTAL RELEASE MEASURES

Personal protection: Avoid inhaling dust and contact with the eyes. Wear a dust mask or respirator and goggles

Environmental Measures: Natural aggregates are inert and the release of aggregate dust into the environment does not constitute a significant environmental hazard; however where dust passes beyond the site boundary it may be regarded as statutory nuisance under the Environmental Protection Act.

Method of Cleaning: If possible avoid dry sweeping, which generates dust. Vacuum dust where practical or use water spray to suppress dust.

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7 / HANDLING AND STORAGE

Handling: The product should be handled in a manner that will minimise the generation of airborne dust

Manual handling of bagged product should be avoided so far as is reasonable practical. Where this is not possible, an assessment should be made, taking into account the load, environment, task and individual capability and training. .

Storage: Bagged products should be palletised and kept in a secure, ventilated area.

Loose natural aggregates should be stored in bays, bins or hoppers where practicable and /or measures taken to suppress airborne dust.

8 / EXPOSURE CONTROLS/PERSONAL PROTECTION

WORKPLACE EXPOSURE LIMITS

Total Inhalable Nuisance Dust: 10.0 mg/m³ (WEL)

Total Respirable Nuisance Dust: 4.0 mg/m³ (WEL)

Respirable Crystalline Silica: 0.1 mg/m³ (WEL)

All are given as maximum concentrations and expressed as an 8 Hour Time Weighted Average (8Hr TWA)

Prevention Measures

Use dust extraction, containment and suppression where possible

Respiratory protection

Suitable respiratory protection (HSE approved standard) should be worn to protect against inhalation of dust.

Skin and eyes protection

Gloves, overalls and goggles should be worn during handling and use of this product

9 / PHYSICAL AND CHEMICAL PROPERTIES

Odourless particles of solid material in the form of crushed rock or sand and gravel. Other chemical properties not applicable under ambient conditions

10 / STABILITY AND REACTIVITY

Conditions contributing to chemical instability: NONE

Hazardous decomposition products: NONE

Special precautions: NONE

11 / TOXICOLOGICAL INFORMATION

SHORT TERM EFFECTS

Eye contact: May cause transient irritation to the eyes

Skin: Prolonged or repeated contact with mineral dust may cause the skin to dry out giving rise to dermatitis

Ingestion: Extremely unlikely

Inhalation: Inhalation of mineral dusts over a prolonged period may give rise to a number of respiratory illnesses including, chronic bronchitis, pneumoconiosis and silicosis (if silica present). People who develop silicosis have an increased risk of lung cancer.

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12 / ECOLOGICAL INFORMATION

Fugitive emissions of dusts can lead to soiling and subsequent damage to sensitive vegetation after prolonged exposure. Silica sand, however, is classified as inert and not considered to pose a significant ecological hazard.

13 / DISPOSAL CONSIDERATIONS

Disposal should be in accordance with current local and national legislation. As an inert material, an approved solid waste disposal or landfill may be used.

14 / DISPOSAL CONSIDERATIONS

Classification is not required for conveyance

15 / REGULATORY INFORMATION

Chemicals (Hazard Information and packaging for supply)

REGULATIONS

Classifications: NONE

Workplace Exposure Limits – HSE Guidance Note EH40

16 / OTHER INFORMATION

Training advice: Wear and use PPE

IMPORTANT NOTES

The purpose of this data sheet is to provide Health, Safety and Environmental Guidance on the safe handling, use and disposal of natural aggregates supplied by J Clubb Ltd. The information contained in this Safety Data Sheet was considered the best available at the date of issue and should alert purchasers and/or users to the usual hazards in handling the supplied material when using it within the ordinary range of uses for which such material is normally supplied.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.