

# C.O.S.H.H.

**NATURAL AGGREGATES**  
(FLINT, SILICA, GRANITE, LIMESTONE,  
IGNEOUS/METAMORPHIC ROCKS)



**EAST THAMES  
AGGREGATES  
LIMITED**

## **IDENTIFICATION**

### **SUBSTANCES/PREPARATION AND COMPANY**

Product Name:

Sand, Gravel, Granite, Gritstone, Crushed Rocks  
Containing Quartz

#### **Application:**

A basic construction material and as a component  
of concrete,  
mortar, macadams, asphalts and similar materials.

### **COMPOSITION/INFORMATION ON INGREDIENTS**

General:

A mixture of naturally occurring oxides, silicate  
minerals and free  
silica (quartz).

Hazardous Ingredients:

This product contains free crystalline silica (quartz)  
in the range of  
30% to 100%.

Hazardous for Supply Classification:

Harmful (Xn).

### **HAZARDS IDENTIFICATION**

Eyes:

May cause irritation.

Skin:

No hazard.

Inhalation:

Prolonged exposure to free crystalline silica dust in  
the respirable  
size range causes progressive irreversible lung  
disease (Silicosis).

Ingestion:

Not a toxic hazard but ingestion of a significant  
amount could  
block airways or gullet.

### **FIRST AID MEASURES**

Eyes:

Irrigate or flood the eye with clean water. Seek  
medical advice if  
the particles cannot be removed by this method.

Skin/ Inhalation/ Ingestion:

Not applicable.

### **FIRE FIGHTING MEASURES**

Aggregates are non-flammable!

### **ACCIDENTAL RELEASE MEASURES**

Personal Precautions:

In the event of a spillage or leakage, wear eye  
protection. Avoid  
breathing dust by wearing respiratory protective  
equipment.

**Environmental Measures:**

No Hazard

### **Method of cleaning:**

Use methods which will minimise generation of  
dust. Avoid dry sweeping. If possible, spray the  
material with water to prevent airborne dust. If a  
vacuum system is used to clear up the dry material,  
the vacuum should be filled with a highly efficient  
filter suitable for harmful dusts.

### **HANDLING AND STORAGE**

Handling:

Eye protection may be needed to keep dust out of the  
eyes. Local extraction, ventilation or respiratory  
protective equipment may be needed to prevent  
inhalation of dust more than the Occupational  
Exposure Limits for free crystalline silica and total  
dust.

Storage:

No special precautions.

### **EXPOSURE CONTROLS/PERSONAL PROTECTION**

Eyes:

Eye protection should be dust tight type conforming  
to BSEN 166.

Skin:

Not applicable.

Inhalation:

Respiratory protection should be of a type suitable  
for hazardous.  
dusts and selected in accordance with Health and  
Safety Executive  
publication HS(G) 53.

### **PHYSICAL AND CHEMICAL PROPERTIES**

Natural Aggregates are particulate solids with  
extremely high

melting points. Density range of up to 2500kg/m<sup>3</sup>.

### **STABILITY AND REACTIVITY**

Highly chemically stable.

### **TOXICOLOGICAL INFORMATION**

Prolonged exposure to respirable dust of free  
crystalline silica will cause Silicosis, which is an  
irreversible lung disease. The particles of silica cause  
scar tissue to form and produce a condition known as  
Fibrosis. Health effects can occur many years after  
exposure has ceased.

### **ECOLOGICAL INFORMATION**

Natural Aggregates containing Quartz are highly  
stable inert.

materials with no ecotoxicity.

### **DISPOSAL CONSIDERSTIONS**

No special precautions.

## TRANSPORTATION INFORMATION

Not classified "Hazardous for Conveyance".

## REGULATORY INFORMATION

Risk Phrases:

R20: Harmful by inhalation.

R48: Danger or serious damage to health by prolonged exposure.

Safety Phrases:

S22: Do not breathe dust.

### Occupational Exposure Limits:

Free crystalline silica Maximum Exposure Limit 0.4mg/m<sup>3</sup>

respirable dust 8 Hour Time Weighted Average. Recommended

Short Time Exposure Limit 1.2mg/m<sup>3</sup> respirable dust (15 minutes reference period).

All types of dust have an Occupational Exposure Standard of 10mg/m<sup>3</sup> inhalable dust 8 Hour Time Weighted Average. Recommended Short Term Exposure Limit 30mg/m<sup>3</sup> (15 minutes reference period).

## OTHER INFORMATION

The dry dust from Natural Aggregates is a substance hazardous to health and as such the employer of people who may be exposed to it at work must carry out an assessment under the Control of Substances Hazardous to Health Regulations 1994.

The presence of free silica of respirable size (having a Maximum Exposure Limit) means that it is a legal requirement to always reduce exposure to it to as low a level as is reasonably practicable and in no circumstances to exceed the Maximum Exposure Limit.

**NB: Possession of this health and safety data sheet does not constitute an assessment. (Guidance Only).**

The use of Personal Protective Equipment is subject to the "Personal Protective Equipment at Work Regulations 1992". All new Personal Protective Equipment must carry the CE Mark of Conformity with European Standards.

Where exposure to respirable crystalline silica dust is such that there is a reasonable likelihood of Silicosis the health surveillance for this condition will be required under the C.O.S.S.H. Regulation. The C.O.S.S.H. Regulations prohibit the use of any substance containing free silica as an abrasive for blasting articles in any blasting apparatus, Substances containing free silica are not recommended for the sand blasting of buildings.

## USEFUL REFERENCES

The following publications are all available from HSE Book Libraries and Suppliers.

General COSHH Approved Codes of Practice L5.

Booklet EH.40/95 "Occupational Exposure Limits"

Guidance Notes EH.59 "Crystalline Silica"

Booklet HS(G) 53 "Respiratory Protective Equipment: A Practical Guide for Users"

Booklet L.25 "Personal Protective Equipment at Work: Guidance on Regulation"

