HarbisonWalker

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or D-CAST 85 GOLD CASTABLE; D-CAST 85 GOLD CASTABLE WF

designation of the mixture

Registration number -

Synonyms None.

 Brand Code
 0752, 384A, 377C

 Issue date
 22-July-2016

Version number 01

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses For Industrial Use Only

Users should be informed of the potential presence of respirable dust and respirable crystalline silica

as well as their potential hazards. Appropriate training in the proper use and handling of this

material should be provided as required under applicable regulations.

Manufacturer HarbisonWalker International Limited

Address Dock Road South

Bromborough

Wirral

United Kingdom

Division United Kingdom

Contact personCorporate Product SafetyGeneral Phone:44.(0)151.641.5900Email addressREACH@thinkhwi.com

CHEMTREC 24 HOUR EMERGENCY #

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

This preparation does not meet the criteria for classification according to Directive 1999/45/EC as amended.

Classification according to Regulation (EC) No 1272/2008 as amended

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary

Physical hazards Not classified for physical hazards.

Health hazards Not classified for health hazards. However, occupational exposure to the mixture or substance(s)

may cause adverse health effects.

Environmental hazards Not classified for hazards to the environment. **Specific hazards** Prolonged exposure may cause chronic effects.

Main symptoms Direct contact with eyes may cause temporary irritation.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms None.

Signal word None.

Hazard statements The mixture does not meet the criteria for classification.

Precautionary statements

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Material name: D-CAST 85 GOLD CASTABLE; D-CAST 85 GOLD CASTABLE WF 0752, 384A, 377C Version #: 01 Issue date: 22-July-2016

Supplemental label information

Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Overexposure to the respirable dust of crystalline silica (quartz or cristobalite, less than or equal to 5 microns in size) may lead to silicosis in humans, which is a progressive and irreversible lung disease. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name		%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Aluminium Oxide (Non-Fibrous)		80 - < 90	1344-28-1 215-691-6	01-2119529248-35-0134	-	
Classification:	DSD: -					
	CLP: -					
Cement, Alumina, Chemicals		1 - < 3	65997-16-2 266-045-5	-	-	
Classification:	DSD: -					
	CLP: -					

Other components below reportable levels 10 - < 20

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008. DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance. PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

SECTION 4: First aid measures

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur. 4.2. Most important Direct contact with eyes may cause temporary irritation.

symptoms and effects, both

acute and delayed

4.3. Indication of any immediate medical attention

and special treatment

needed

Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing

media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing Not available.

media

5.2. Special hazards arising from the substance or

mixture

Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters

Not available.

Material name: D-CAST 85 GOLD CASTABLE: D-CAST 85 GOLD CASTABLE WF 0752, 384A, 377C Version #: 01 Issue date: 22-July-2016

Not available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency

personnel

Keep unnecessary personnel away. For personal protection, see section 8.

For emergency

responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental Avoid discharge into drains, water courses or onto the ground.

precautions

6.3. Methods and material for containment and cleaning up

Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

6.4. Reference to other

sections

For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe

handling

Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not breathe dust. Avoid prolonged exposure.

7.2. Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

UK. EH40 Workplace Exposure Components	e Limits (WELs) Type	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
Amorphous silica (CAS 7631-86-9)	TWA	6 mg/m3	Inhalable dust.
•		2.4 mg/m3	Respirable dust.
Diiron trioxide (CAS 1309-37-1)	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Fume.
		4 mg/m3	Respirable.
		10 mg/m3	Inhalable
Fumes, Silica (CAS 69012-64-2)	TWA	6 mg/m3	Inhalable dust.
•		2.4 mg/m3	Respirable dust.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
Titanium dioxide (CAS 13463-67-7)	TWA	4 mg/m3	Respirable.
,		10 mg/m3	Inhalable

Biological limit values

No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Follow standard monitoring procedures.

Derived no-effect level (DNEL)

Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information Personal protection equipment should be chosen according to the CEN standards and in discussion

with the supplier of the personal protective equipment.

Wear safety glasses with side shields (or goggles). Eye/face protection

Skin protection

Wear appropriate chemical resistant gloves. - Hand protection

- Other Wear suitable protective clothing.

Respiratory protection Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels

exceeding the exposure limits.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.







Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls

Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid. **Form** Solid.

Colour Not available. Odour Not available. **Odour threshold** Not available. Not available. pН Not available. Melting point/freezing point Initial boiling point and Not available.

boiling range

Flash point Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit -

upper (%)

Not available.

Not available. Vapour pressure Vapour density Not available. **Relative density** Not available.

Solubility(ies)

Solubility (water) Not available. Solubility (other) Not available. **Partition coefficient** Not available.

(n-octanol/water)

Auto-ignition temperature Not available. **Decomposition temperature** Not available. **Viscosity** Not available. Not available. **Explosive properties Oxidizing properties** Not available.

Material name: D-CAST 85 GOLD CASTABLE; D-CAST 85 GOLD CASTABLE WF

9.2. Other information No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous No dangerous reaction known under conditions of normal use.

reactions

10.4. Conditions to avoid Contact with incompatible materials.

10.5. Incompatible materials Acids. Chlorine.

Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not

be specific to industrial application exposure.

10.6. Hazardous

decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact No adverse effects due to skin contact are expected. **Eve contact** Direct contact with eyes may cause temporary irritation.

May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of Ingestion

occupational exposure.

Symptoms Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects

Acute toxicity No data available.

Due to partial or complete lack of data the classification is not possible. Skin corrosion/irritation Serious eye damage/eye Due to partial or complete lack of data the classification is not possible.

irritation

Carcinogenicity

Respiratory sensitisation

Skin sensitisation

Germ cell mutagenicity

Due to partial or complete lack of data the classification is not possible.

Due to partial or complete lack of data the classification is not possible. Due to partial or complete lack of data the classification is not possible.

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates

dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and

controlled. Risk of cancer cannot be excluded with prolonged exposure. Due to partial or complete lack of data the classification is not possible.

Reproductive toxicity Specific target organ toxicity

- single exposure

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity

- repeated exposure

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance

information

No information available.

Other information This product has no known adverse effect on human health.

SECTION 12: Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the 12.1. Toxicity

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.2. Persistence and

degradability

No data is available on the degradability of this product.

12.3. Bioaccumulative

potential

No data available.

Partition coefficient

n-octanol/water (log Kow)

Not available.

Bioconcentration factor (BCF)Not available.12.4. Mobility in soilNo data available.12.5. Results of PBTNot available.

and vPvB assessment

12.6. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Not available.

Contaminated packaging Not available.

EU waste code Not available.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use

Not regulated.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not listed.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not listed

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not listed.

Directive 94/33/EC on the protection of young people at work

Not listed.

Other regulationsThe product is classified and labelled in accordance with EC directives or respective national laws

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations 15.2. Chemical safety Follow national regulation for work with chemical agents. No Chemical Safety Assessment has been carried out.

assessment

SECTION 16: Other information

List of abbreviationsNot available.ReferencesNot available.Information on evaluationNot available.

Information on evaluation method leading to the classification of mixture

None.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

Revision information None.

Training information Not available.

Disclaimer This information is based on our present knowledge on creation date. However, this shall not

constitute a guarantee for any specific product features and shall not establish a legally valid

contractual relationship.

Material name: D-CAST 85 GOLD CASTABLE; D-CAST 85 GOLD CASTABLE WF 0752, 384A, 377C Version #: 01 Issue date: 22-July-2016