# SAFETY DATA SHEET



## 1. Identification

Product identifier NARPHOS 85 MORTAR DRY

Other means of identification

Brand Code 8176

**Recommended use** For Industrial or Professional Use Only

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name HarbisonWalker International

Address 1305 Cherrington Parkway, Suite 100

Moon Township, Pennsylvania 15108 US

**Telephone** General Phone: 412-375-6600

Website www.thinkHWI.com Emergency phone number Not available.

# 2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 1

Carcinogenicity Category 1A
Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes serious eye damage. May cause cancer. Causes damage to organs through prolonged or

repeated exposure.

**Precautionary statement** 

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective

clothing/eye protection/face protection.

**Response** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Immediately call a poison center/doctor.

**Storage** Store away from incompatible materials.

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental 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.

# 3. Composition/information on ingredients

**Mixtures** 

Material name: NARPHOS 85 MORTAR DRY

Chemical name	Common name and synonyms	CAS number	%
Aluminium Oxide (Non-Fibrous	3)	1344-28-1	70 - 90
Aluminium Sulphate		10043-01-3	2.5 - 10
Amorphous Silica	Fumed Silica Silica, crystalline free	7631-86-9	2.5 - 10
Kaolin		1332-58-7	2.5 - 10
Titanium Dioxide		13463-67-7	2.5 - 10
Diiron Trioxide		1309-37-1	1 - 2.5
Quartz (SiO2)		14808-60-7	1 - 2.5
Cristobalite		14464-46-1	0.1 - 2.5
Other components below reportable levels			2.5 - 10

Crystalline silica may be present at low concentrations; most of this is encapsulated in the coarse aggregate or as part of the clays or sands.

#### 4. First-aid measures

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

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

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Get medical attention immediately.

Use fire-extinguishing media appropriate for surrounding materials.

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed **General information**  Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Prolonged exposure may cause chronic effects.

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

# 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment and precautions for firefighters Not available.

Not available.

## 6. Accidental release measures

Personal precautions. protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

**Environmental precautions** 

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

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# 7. Handling and storage

#### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not get this material in contact with eyes. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

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

## 8. Exposure controls/personal protection

#### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contar Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cristobalite (CAS 14464-46-1)	PEL	0.05 mg/m3	Respirable dust.
Diiron Trioxide (CAS 1309-37-1)	PEL	10 mg/m3	Fume.
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Quartz (SiO2) (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
Titanium Dioxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.
US. OSHA Table Z-3 (29 CFR 1910.1000)			_
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Amorphous Silica (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable.
		1.2 mppcf	Respirable.
Diiron Trioxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.

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Components	Туре	Value	Form	
		2.4 mppcf	Respirable.	
Titanium Dioxide (CAS	TWA	5 mg/m3	Respirable fraction.	
13463-67-7)		15 mg/m3	Total dust.	
		50 mppcf	Total dust.	
		15 mppcf	Respirable fraction.	
US. ACGIH Threshold Limit	: Values			
Components	Туре	Value	Form	
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.	
Aluminium Sulphate (CAS 10043-01-3)	TWA	1 mg/m3	Respirable fraction.	
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.	
Diiron Trioxide (CAS 1309-37-1)	TWA	5 mg/m3	Respirable fraction.	
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.	
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3		
US. NIOSH: Pocket Guide t			F	
Components	Туре	Value	Form	
Aluminium Sulphate (CAS 10043-01-3)	TWA	2 mg/m3		
Amorphous Silica (CAS 7631-86-9)	TWA	6 mg/m3		
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable dust.	
Diiron Trioxide (CAS 1309-37-1)	TWA	5 mg/m3	Dust and fume.	
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.	
		10 mg/m3	Total	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.	
ogical limit values	No biological exposure limits noted for	or the ingredient(s).		
osure guidelines	Occupational exposure to nuisance of should be monitored and controlled, and respirable crystalline silica should	Occupational exposure to nuisa		
ropriate engineering trols	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. Proveyewash station.			
vidual protection measures Eye/face protection	, such as personal protective equipm Wear safety glasses with side shields			
Skin protection  Hand protection	Wear appropriate chemical resistant	aloves.		
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.			
Respiratory protection	Use a NIOSH/MSHA approved respi exceeding the exposure limits.	ator ii there is a risk of exposur	e to dustriume at levels	

Wear appropriate thermal protective clothing, when necessary.

Thermal hazards









General hygiene considerations

Observe any medical surveillance requirements. 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.

## 9. Physical and chemical properties

**Appearance** 

Solid. Physical state **Form** Solid.

Color Not available. Not available. Odor **Odor threshold** Not available. Not available. Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

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

Flammability limit - lower

(%)

Flammability limit - upper

Explosive limit - lower (%)

Explosive limit - upper (%) Not available. Vapor pressure Not available. Not available. Vapor density Relative density Not available.

Solubility(ies)

Not available. Solubility (water) Partition coefficient Not available. (n-octanol/water)

Not available. **Auto-ignition temperature** Not available. **Decomposition temperature** Not available. **Viscosity** 

Other information

Not explosive. **Explosive properties Oxidizing properties** Not oxidizing.

## 10. Stability and reactivity

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

**Chemical stability** Material is stable under normal conditions. Possibility of hazardous Hazardous polymerization does not occur.

Not available.

Not available.

Not available.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Acids. Chlorine.

Incompatibility is based strictly upon potential theoretical reactions between chemicals and may

not be specific to industrial application exposure.

Hazardous decomposition

products

No hazardous decomposition products are known.

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## 11. Toxicological information

#### Information on likely routes of exposure

**Inhalation** Prolonged inhalation may be harmful.

**Skin contact** No adverse effects due to skin contact are expected.

**Eye contact** Causes serious eye damage.

**Ingestion** Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Permanent eye damage including blindness could result.

#### Information on toxicological effects

Acute toxicity Not known.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye

irritation

Causes serious eye damage.

#### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity 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. May cause cancer. Occupational exposure to respirable dust and

respirable crystalline silica should be monitored and controlled.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous Silica (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

Cristobalite (CAS 14464-46-1) 1 Carcinogenic to humans.

Diiron Trioxide (CAS 1309-37-1) 3 Not classifiable as to carcinogenicity to humans.

Quartz (SiO2) (CAS 14808-60-7) 1 Carcinogenic to humans.

Titanium Dioxide (CAS 13463-67-7) 2B Possibly carcinogenic to humans.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Cristobalite (CAS 14464-46-1) Cancer Quartz (SiO2) (CAS 14808-60-7) Cancer

#### US. National Toxicology Program (NTP) Report on Carcinogens

Cristobalite (CAS 14464-46-1) Known To Be Human Carcinogen.

Reasonably Anticipated to be a Human Carcinogen.

Quartz (SiO2) (CAS 14808-60-7) Known To Be Human Carcinogen.

**Reproductive toxicity**This product is not expected to cause reproductive or developmental effects.

**Developmental effects** 

 Quartz (SiO2)
 0

 Developmental effects - EU category
 0

 Quartz (SiO2)
 0

 Embryotoxicity
 0

 Quartz (SiO2)
 0

 Reproductivity
 0

 Quartz (SiO2)
 0

**Specific target organ toxicity -** Not classified.

single exposure

Specific target organ toxicity -

repeated exposure

Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** 

Not an aspiration hazard.

**Chronic effects** 

Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be

harmful. Prolonged exposure may cause chronic effects.

# 12. Ecological information

**Ecotoxicity** 

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

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.

# 13. Disposal considerations

**Disposal instructions** 

This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Hazardous waste code

Contaminated packaging

Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

Waste from residues / unused

products

Not available.

Not available.

# 14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

**IMDG** 

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and Not applicable.

the IBC Code

# 15. Regulatory information

**US federal regulations** 

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All chemical substances in this product are listed on the TSCA chemical substance inventory where required.

# TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

## **CERCLA Hazardous Substance List (40 CFR 302.4)**

Aluminium Sulphate (CAS 10043-01-3)

SARA 304 Emergency release notification

Listed.

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Cristobalite (CAS 14464-46-1) Cancer Quartz (SiO2) (CAS 14808-60-7) Cancer Cristobalite (CAS 14464-46-1) luna effects Quartz (SiO2) (CAS 14808-60-7) lung effects

Cristobalite (CAS 14464-46-1) immune system effects Quartz (SiO2) (CAS 14808-60-7) immune system effects

Cristobalite (CAS 14464-46-1) kidney effects Quartz (SiO2) (CAS 14808-60-7) kidney effects

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard Serious eye damage or eye irritation

categories Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.Aluminium Oxide (Non-Fibrous)1344-28-170 - 90

#### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

#### **US state regulations**

# **California Proposition 65**



WARNING: This product can expose you to chemicals including Titanium Dioxide: Titanium Dioxide, which is

known to the State of California to cause cancer. For more information go

to www.P65Warnings.ca.gov.

# California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz (SiO2) (CAS 14808-60-7) Listed: October 1, 1988 Titanium Dioxide (CAS 13463-67-7) Listed: September 2, 2011

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Cristobalite (CAS 14464-46-1) Quartz (SiO2) (CAS 14808-60-7) Titanium Dioxide (CAS 13463-67-7)

#### **International Inventories**

Country(s) or region	Inventory name On inv	entory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
*A "Voo" indicates that all compar	nents of this product comply with the inventory requirements administered by the governing of	untru(a)

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## 16. Other information, including date of preparation or last revision

 Issue date
 04-30-2015

 Revision date
 09-09-2019

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A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.

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