SAFETY DATA SHEET



1. Identification

Product identifier CLIPPER DP; CLIPPER DP H

Other means of identification

Brand Code 5196, 719C

Recommended use For Industrial Use Only

Recommended restrictions DO NOT INGEST. KEEP MATERIAL AWAY FROM CHILDREN AND ANIMALS TO PREVENT

ACCIDENTAL INGESTION. Avoid dry cutting, blasting, or dust generation.

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/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 CHEMTREC 24 HOUR 1-800-424-9300

EMERGENCY #

Supplier Not available.

2. Hazard(s) identification

Classified hazards

This item is defined as an article per OSHA, REACH, and WHMIS and is therefore exempt from labeling. A Safety Data Sheet is available.

This item is not Classified as hazardous. However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. Wear protective gloves/protective clothing/eye protection.

Label elements

This item is defined as an article per OSHA, REACH, and WHMIS and is therefore exempt from labeling. A Safety Data Sheet is available.

This item is not Classified as hazardous. However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. Wear protective gloves/protective clothing/eye protection.

Other hazards

This item is defined as an article per OSHA, REACH, and WHMIS and is therefore exempt from labeling. A Safety Data Sheet is available.

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3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Mullite		1302-93-8	60 - 80
FIBROUS GLASS		65997-17-3	10 - 20
SILICA, CRYSTALLINE, CRISTOBALITE		14464-46-1	10 - 20
SILICA, CRYSTALLINE, QUARTZ		14808-60-7	1 - 2.5
Titanium Dioxide		13463-67-7	1 - 2.5

Material name: CLIPPER DP; CLIPPER DP H 5196, 719C Version #: 01 Issue date: 05-14-2018 SDS CANADA

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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.

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

Prolonged exposure may cause chronic effects.

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

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed .

General information

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

Symptome may 20 doubted.

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

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Use fire-extinguishing media appropriate for surrounding materials.

Not available.

Not applicable.

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. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Following product recovery, flush area with water. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the

5

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

7. Handling and storage

Environmental precautions

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. 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

No special storage precautions noted.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Components	Type	edule 1, Table 2) Value	Form
IBROUS GLASS (CAS 5997-17-3)	TWA	0.2 fibers/cm3	Fiber.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		5 mg/m3	Total particulate.
		5 mg/m3	Fiber, total
SILICA, CRYSTALLINE,	TWA	0.025 mg/m3	Respirable.
CRISTOBALITE (CAS 4464-46-1)		J	·
,	T14/4	0.025 mg/m3	Respirable particles.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles.
Fitanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
Canada. British Columbia OEL Safety Regulation 296/97, as a	Ls. (Occupational Exposure Limits	s for Chemical Substances, Oc	cupational Health and
Components	Туре	Value	Form
FIBROUS GLASS (CAS	TWA	0.2 fibers/cm3	Fiber.
65997-17-3)		5 mg/m3	Inhalable fibers.
SILICA, CRYSTALLINE,	TWA	0.025 mg/m3	Respirable fraction.
CRISTOBALITE (CAS 14464-46-1)	1 ***	5.525 mg/mb	. toophable habitori.
SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Γitanium Dioxide (CAS	TWA	3 mg/m3	Respirable fraction.
13463-67-7)		10 mg/m3	Total dust.
Canada. Manitoba OELs (Reg. Components	. 217/2006, The Workplace Safety / Type	And Health Act) Value	Form
SILICA, CRYSTALLINE, CRISTOBALITE (CAS	TWA	0.025 mg/m3	Respirable fraction.
14464-46-1) SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
•	ol of Exposure to Biological or Ch	nemical Agents)	
Components	Type	Value	Form
FIBROUS GLASS (CAS 65997-17-3)	TWA	0.5 fibers/ml	Respirable fibers.
·		5 mg/m3	Inhalable fraction.
SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable fraction.
SILICA, CRÝSTALLINE,	TWA	0.1 mg/m3	Respirable fraction.
11 IA DT7 (CAS 14909 60 7)			
QUARTZ (CAS 14808-60-7) Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
Titanium Dioxide (CAS 13463-67-7) Canada. Quebec OELs. (Minis	try of Labor - Regulation Respecti	ing the Quality of the Work Env	
Titanium Dioxide (CAS 3463-67-7) Canada. Quebec OELs. (Minis Components	try of Labor - Regulation Respecti Type	ing the Quality of the Work Env Value	Form
Fitanium Dioxide (CAS 13463-67-7) Canada. Quebec OELs. (Minis Components FIBROUS GLASS (CAS	try of Labor - Regulation Respecti	ing the Quality of the Work Env Value 1 fibers/cm3n	
Fitanium Dioxide (CAS 13463-67-7) Canada. Quebec OELs. (Minis Components FIBROUS GLASS (CAS	try of Labor - Regulation Respecti Type TWA	ing the Quality of the Work Env Value 1 fibers/cm3n 10 mg/m3	Fiber. Total dust.
Citanium Dioxide (CAS 13463-67-7) Canada. Quebec OELs. (Minis Components FIBROUS GLASS (CAS 65997-17-3) CILICA, CRYSTALLINE, CRISTOBALITE (CAS	try of Labor - Regulation Respecti Type	ing the Quality of the Work Env Value 1 fibers/cm3n	Fiber.
Titanium Dioxide (CAS 13463-67-7) Canada. Quebec OELs. (Minis Components FIBROUS GLASS (CAS 65997-17-3) SILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1) SILICA, CRYSTALLINE,	try of Labor - Regulation Respecti Type TWA	ing the Quality of the Work Env Value 1 fibers/cm3n 10 mg/m3	Fiber. Total dust.
Citanium Dioxide (CAS 13463-67-7) Canada. Quebec OELs. (Minis Components FIBROUS GLASS (CAS 65997-17-3) CILICA, CRYSTALLINE, CRISTOBALITE (CAS 14464-46-1)	try of Labor - Regulation Respecti Type TWA	ing the Quality of the Work Env Value 1 fibers/cm3n 10 mg/m3 0.05 mg/m3	Form Fiber. Total dust. Total dust.

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica

should be monitored and controlled.

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

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.Other Use of an impervious apron is recommended.

exceeding the exposure limits.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.







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

Physical state Solid.

Form Brick or Cast Shape Solid.

Color Not available.
Odor Not available.
Odor threshold Not available.
pH Not available.
Melting point/freezing point Not available.
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

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

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

10. Stability and reactivity

ReactivityThe 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

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

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.

11. Toxicological information

Information on likely routes of exposure

InhalationNo adverse effects due to inhalation are expected.Skin contactNo adverse effects due to skin contact are expected.Eye contactDirect contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity Not known.

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

Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

FIBROUS GLASS (CAS 65997-17-3) Irritant SILICA, CRYSTALLINE, CRISTOBALITE (CAS Irritant

14464-46-1)

Titanium Dioxide (CAS 13463-67-7) Irritant

Respiratory sensitization Not a respiratory sensitizer.

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

Germ cell mutagenicityNo 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.

ACGIH Carcinogens

FIBROUS GLASS (CAS 65997-17-3)

A2 Suspected human carcinogen.

SILICA, CRYSTALLINE, CRISTOBALITE (CAS

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Titanium Dioxide (CAS 13463-67-7)

A2 Suspected human carcinogen.

A2 Suspected human carcinogen.

A4 Not classifiable as a human carcinogen.

Canada - Alberta OELs: Carcinogen category

FIBROUS GLASS (CAS 65997-17-3)

SILICA, CRYSTALLINE, CRISTOBALITE (CAS

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Canada - Manitoba OELs: carcinogenicity FIBROUS GLASS (CAS 65997-17-3)

SILICA, CRYSTALLINE, CRISTOBALITE (CAS

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Titanium Dioxide (CAS 13463-67-7)

Suspected human carcinogen.

Not classifiable as a human carcinogen.

Detected carcinogenic effect in animals.

Detected carcinogenic effect in animals.

Canada - Quebec OELs: Carcinogen category

FIBROUS GLASS (CAS 65997-17-3) SILICA, CRYSTALLINE, CRISTOBALITE (CAS

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

SILICA, CRYSTALLINE, CRISTOBALITE (CAS

14464-46-1)

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

Titanium Dioxide (CAS 13463-67-7)

1 Carcinogenic to humans. 1 Carcinogenic to humans.

2B Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

FIBROUS GLASS (CAS 65997-17-3)

SILICA, CRYSTALLINE, CRISTOBALITE (CAS

14464-46-1)

Reproductive toxicity

Reasonably Anticipated to be a Human Carcinogen.

Known To Be Human Carcinogen.

Reasonably Anticipated to be a Human Carcinogen. Known To Be Human Carcinogen.

SILICA, CRYSTALLINE, QUARTZ (CAS 14808-60-7)

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

0

0

Causes damage to organs through prolonged or repeated exposure.

Developmental effects

SILICA, CRYSTALLINE, QUARTZ **Developmental effects - EU category** SILICA, CRYSTALLINE, QUARTZ **Embryotoxicity**

SILICA, CRYSTALLINE, QUARTZ 0

Reproductivity

SILICA, CRYSTALLINE, QUARTZ 0

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Aspiration hazard Not an aspiration hazard.

Chronic effects Causes damage to organs through prolonged or repeated exposure.

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 this product.

Bioaccumulative potential

No data available. No data available.

Other adverse effects

Mobility in soil

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 codeSince 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.

Contaminated packaging Not available.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

FIBROUS GLASS (CAS 65997-17-3)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
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)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

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

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).

Material name: CLIPPER DP; CLIPPER DP H 5196, 719C Version #: 01 Issue date: 05-14-2018

16. Other information

Issue date 05-14-2018

Version # 01

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 Product and Company Identification: Product Codes

Composition / Information on Ingredients: After Reaction Composition

Material name: CLIPPER DP; CLIPPER DP H 5196, 719C Version #: 01 Issue date: 05-14-2018