SAFETY DATA SHEET



1. Identification

Product identifier VISION DC

Other means of identification

Brand Code 9365

Recommended use For Industrial Use Only

Recommended restrictions None known.

Manufacturer/Supplier information

Manufacturer

HarbisonWalker International Company name

Address 1305 Cherrington Parkway, Suite 100

Moon Township, Pennsylvania 15108 US

Telephone General Phone: 412-375-6600

Website www.thinkHWI.com

CHEMTREC 24 HOUR **Emergency phone number** 1-800-424-9300

EMERGENCY #

2. Hazard(s) identification

Classified hazards

This item is defined as an article per OSHA (29 CFR 1910.1200) and is therefore exempt from labeling. A Safety Data Sheet is available.

This item is not hazardous per OSHA 29 CFR 1910.1200(c). However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. May cause respiratory irritation, lung injury, or cancer by inhalation. Limit skin contact. Wash hands after handling. Dispose of waste and residues in accordance with local authority requirements. Wear protective gloves/protective clothing/eye protection. Dust may cause cancer.

Label elements

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Hazard(s) not otherwise classified (HNOC)

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3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Mullite		1302-93-8	60 - 80
Zircon		14940-68-2	20 - 40
ZIRCONIUM DIOXIDE		1314-23-4	2.5 - 10
Silicon Dioxide		7631-86-9	1 - 2.5

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

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

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

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

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

symptoms/effects, acute and

delayed

Indication of immediate

medical attention and special

Treat symptomatically.

treatment needed

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Not available.

Specific hazards arising from

the chemical

Not applicable.

Special protective equipment and precautions for firefighters Not available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. 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.

For waste disposal, see section 13 of the SDS.

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

7. Handling and storage

Precautions for safe handling

Avoid prolonged exposure. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see Section 10

of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Zircon (CAS 14940-68-2)	PEL	5 mg/m3	
ZIRCONIUM DIOXIDE (CAS 1314-23-4) US. OSHA Table Z-3 (29 CFR 191	PEL	5 mg/m3	
Components	Туре	Value	
Silicon Dioxide (CAS	TWA	0.8 mg/m3	
7631-86-9)		3	

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
Mullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable fraction.
Zircon (CAS 14940-68-2)	STEL	10 mg/m3	
	TWA	5 mg/m3	
ZIRCONIUM DIOXIDE (CAS 1314-23-4)	STEL	10 mg/m3	
,	TWA	5 mg/m3	

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US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	
Silicon Dioxide (CAS 7631-86-9)	TWA	6 mg/m3	
Zircon (CAS 14940-68-2)	STEL	10 mg/m3	
	TWA	5 mg/m3	
ZIRCONIUM DIOXIDE (CAS 1314-23-4)	STEL	10 mg/m3	
•	TWA	5 mg/m3	

No biological exposure limits noted for the ingredient(s). **Biological limit values**

Zirconium silicates (zircon sands) contain trace amounts (106-120 pCi/q) of naturally occurring **Exposure guidelines**

radioactive uranium and thorium. Overexposure by inhalation to respirable dust containing uranium and thorium may cause lung cancer. Eye contact with the dust may cause eye irritation. Measurements made by Dupont during the use of a similar mineral sand indicated the observance of the 5 mg/m3 OSHA PEL for respirable dust and/or the PEL for quartz ensures the user is below the exposure limits established for uranium and thorium. No LD50 or LC50 can be found for zircon

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 Wear safety glasses with side shields (or goggles).

Skin protection

Wear appropriate chemical resistant gloves. Hand protection

Other Wear suitable protective clothing.

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

exceeding the exposure limits.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Always observe good personal hygiene measures, such as washing after handling the material General hygiene

and before eating, drinking, and/or smoking. Routinely wash work clothing and protective considerations

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Solid. **Form** Solid

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

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. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

Not available. Vapor pressure Not available. Vapor density

Material name: VISION DC 9365 Version #: 01 Issue date: 05-10-2015 Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

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 avoidContact 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. Contact your sales representative for

clarification.

Hazardous decomposition

products

No hazardous decomposition products are known.

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

Direct 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 available.

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

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 This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Silicon Dioxide (CAS 7631-86-9)

3 Not classifiable as to carcinogenicity to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

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12. Ecological information

EcotoxicityThe 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.

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 instructionsThis 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
Waste from residues / unused

Not applicable. Not available.

products

Contaminated packaging

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 Not applicable.

Annex II of MARPOL 73/78 and

the IBC Code

15. Regulatory information

US federal regulationsOne or more components are not listed on TSCA.

This product is not known to be 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)

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

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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

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

US. Massachusetts RTK - Substance List

Silicon Dioxide (CAS 7631-86-9)

ZIRCONIUM DIOXIDE (CAS 1314-23-4)

US. New Jersey Worker and Community Right-to-Know Act

Silicon Dioxide (CAS 7631-86-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Silicon Dioxide (CAS 7631-86-9)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region

inventory name	On inventory (yes/no)
Australian Inventory of Chemical Substances (AICS)	No
Domestic Substances List (DSL)	Yes
Non-Domestic Substances List (NDSL)	No
Inventory of Existing Chemical Substances in China (IECSC)	Yes
European Inventory of Existing Commercial Chemical Substances (EINECS)	No
European List of Notified Chemical Substances (ELINCS)	No
Inventory of Existing and New Chemical Substances (ENCS)	No
Existing Chemicals List (ECL)	Yes
New Zealand Inventory	Yes
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
	Australian Inventory of Chemical Substances (AICS) Domestic Substances List (DSL) Non-Domestic Substances List (NDSL) Inventory of Existing Chemical Substances in China (IECSC) European Inventory of Existing Commercial Chemical Substances (EINECS) European List of Notified Chemical Substances (ELINCS) Inventory of Existing and New Chemical Substances (ENCS) Existing Chemicals List (ECL) New Zealand Inventory Philippine Inventory of Chemicals and Chemical Substances

Toxic Substances Control Act (TSCA) Inventory *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

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

Inventory name

05-10-2015 Issue date

Version #

United States & Puerto Rico

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 and Company Identification

Composition / Information on Ingredients: After Reaction Composition

Material name: VISION DC SDS US

No

On inventory (yes/no)*

country(s).