

SAFETY DATA SHEET

1. Identification

Product identifier	HWI RELEASE 20-W	
Other means of identification		
Brand Code	280C	
Recommended use	Industrial Use Only	
Recommended restrictions	Avoid dry cutting, blasting, c	or dust generation.
Manufacturer/Importer/Supplier/I	Distributor information	
Manufacturer		
Company name	HarbisonWalker Internationa	al
Address	1305 Cherrington Parkway, Suite 100	
	Moon Township, Pennsylva	nia 15108 US
Telephone	General Phone:	412-375-6600
Website	www.thinkHWI.com	
Emergency phone number	CHEMTREC 24 HOUR EMERGENCY #	1-800-424-9300

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Specific target organ toxicity, repeated exposure	Category 2
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



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

Chemical name	Common name and synonyms	CAS number	%
Quartz (SiO2)		14808-60-7	20 - 40
Aluminium Oxide (Non-Fibrous)		1344-28-1	10 - 20
Methanol		67-56-1	2.5 - 10
Silicic Acid, Sodium Salt		1344-09-8	2.5 - 10
Other components below reportable levels			20 - 40

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. 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. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.
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 Not available. and precautions for firefighters

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. 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. 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	Keep formation of airborne dusts to a minimum. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe dust. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store

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.

Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust.
Methanol (CAS 67-56-1)	PEL	260 mg/m3	
		200 ppm	
Quartz (SiO2) (CAS 14808-60-7)	PEL	0.05 mg/m3	
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
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limit Values	6		
Components	Туре	Value	Form
Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction
Methanol (CAS 67-56-1)	STEL	250 ppm	
· · · ·	TWA	200 ppm	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

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

US. NIOSH: Pocket Guide to Chemical Hazards

Components	I	Гуре	Va	lue	Form
Methanol (CAS 67-56-1)		STEL	25	5 mg/m3 0 ppm 0 mg/m3	
	·			0 ppm	
Quartz (SiO2) (CAS 14808-60-7)	I	ſWA)5 mg/m3	Respirable dust.
Biological limit values					
ACGIH Biological Expos Components	ure Indices Value	Determinant	Specimen	Sampling 1	Time
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*	
* - For sampling details, pl	•	document.			
Exposure guidelines	Occupational e		ust (total and resp	pirable) and re	spirable crystalline silica
US - California OELs: Sk	in designation				
Methanol (CAS 67-56	-1)	Can b	e absorbed throu	gh the skin.	
US - Minnesota Haz Sub	s: Skin designation	applies			
Methanol (CAS 67-56		Skin d	esignation applie	S.	
US - Tennessee OELs: S	•	Carb		ala tha alvia	
Methanol (CAS 67-56 US ACGIH Threshold Lin			e absorbed throu	gn the skin.	
Methanol (CAS 67-56		•	e absorbed throu	gh the skin.	
US NIOSH Pocket Guide				•	
Methanol (CAS 67-56	-1)	Can b	e absorbed throu	gh the skin.	
Appropriate engineering controls	changes per ho applicable, use maintain airborn established, ma	our) should be used. Ve process enclosures, lo ne levels below recom	entilation rates sh ocal exhaust vent mended exposure o an acceptable	ould be match ilation, or othe e limits. If expo	ventilation (typically 10 air ned to conditions. If r engineering controls to osure limits have not been th facilities and emergency
Individual protection measur					
Eye/face protection	Chemical respire	rator with organic vapo	r cartridge and fu	Il facepiece.	
Skin protection					
Hand protection	Wear appropria	te chemical resistant g	loves.		
Other	Wear appropria	te chemical resistant c	lothing. Use of a	n impervious a	pron is recommended.
Respiratory protection	Use a NIOSH/N exceeding the e		ator if there is a ri	sk of exposure	e to dust/fume at levels
Thermal hazards	Wear appropria	te thermal protective c	lothing, when ne	cessary.	
General hygiene considerations	hygiene measu	not smoke. Keep away res, such as washing a	after handling the	material and I	before eating, drinking, and/o

hygiene measures, such as washing after handling the material and before eating, drinking, a smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	Brown liquid slurry
Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	10 - 12

Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive 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 (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
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 reactions	Hazardous polymerization does not occur.
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 informat	ion
Information on likely routes of e	xposure
Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation.

HWI RELEASE 20-W	7.6 mg/l Species: Rat
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion HWI RELEASE 20-W	Harmful if swallowed. > 2000 mg/kg Species: Rat
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Information on toxicological eff	ects
Acute toxicity	Harmful if swallowed.
Skin corrosion/irritation	Causes skin irritation.

Serious eye damage/eye irritation	Causes serious eye irritation.		
Respiratory or skin sensitization	1		
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. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.		
IARC Monographs. Overall I	Evaluation of Carcinogenicity		
Quartz (SiO2) (CAS 1480			
US. National Toxicology Pro	ogram (NTP) Report on Carcinogens		
	8-60-7) Known To Be Human Carcinogen. Ilated Substances (29 CFR 1910.1001-1050)		
Not regulated.			
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.		
Developmental effects Quartz (SiO2) Developmental effects -	0 Ell category		
Quartz (SiO2) Embryotoxicity	0		
Quartz (SiO2) Reproductivity	0		
Quartz (SiO2)	0		
Specific target organ toxicity - single exposure	Not classified.		
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.		
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			
Partition coefficient n-octan Methanol	ol / water (log Kow) -0.77		
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	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.
Contaminated packaging	Not available.

14. Transport information

DOT			
UN number	UN1230		
UN proper shipping name	Methanol, solution (Methanol RQ = 87566 LBS)		
Transport hazard class(es)			
Class	3		
Subsidiary risk	-		
Label(s)	3		
Packing group	II		
· ·	Read safety instructions, SDS and emergency procedures before handling.		
Special provisions	IB2, T7, TP2		
Packaging exceptions	150		
Packaging non bulk	202		
Packaging bulk	242		
ΙΑΤΑ			
UN number	UN1230		
UN proper shipping name	Methanol solution (Methanol)		
Transport hazard class(es)			
Class	3		
Subsidiary risk	-		
Packing group	II		
Environmental hazards	No.		
ERG Code	3L		
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.		
Other information			
Passenger and cargo	Allowed with restrictions.		
aircraft			
Cargo aircraft only	Allowed with restrictions.		
IMDG			
UN number	UN1230		
UN proper shipping name	METHANOL SOLUTION (Methanol)		
Transport hazard class(es)			
Class	3		
Subsidiary risk	-		
Packing group	II		
Environmental hazards			
Marine pollutant	No.		
EmS	F-E		
	Read safety instructions, SDS and emergency procedures before handling.		
Transport in bulk according to	Not established.		
Annex II of MARPOL 73/78 and			
the IBC Code			





General information

U.S. Department of Transportation (DOT) Requirements: Methanol, solution (Methanol); Class 3; UN1230; PGII

15. Regulatory information

		oue Obersieelliee definied	by the OOLIA Herend Communication	
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 N	Notification (40 CFR 707, S	Subpt. D)		
Not regulated.				
CERCLA Hazardous Substa	nce List (40 CFR 302.4)			
Methanol (CAS 67-56-1)		Listed.		
SARA 304 Emergency release	se notification			
Not regulated.				
US. OSHA Specifically Regu	lated Substances (29 CFF	R 1910.1001-1050)		
Not regulated.				
Superfund Amendments and Re		(SARA)		
Hazard categories	Immediate Hazard - Yes			
	Delayed Hazard - Yes Fire Hazard - Yes			
	Pressure Hazard - No			
	Reactivity Hazard - No			
SARA 302 Extremely hazard	ous substance			
Not listed.				
SARA 311/312 Hazardous chemical	No			
SARA 313 (TRI reporting)				
Chemical name	(CAS number	% by wt.	
Aluminium Oxide (Non-Fil	orous) ´	1344-28-1	10 - 20	
Methanol	6	67-56-1	2.5 - 10	
Other federal regulations				
Clean Air Act (CAA) Section	112 Hazardous Air Pollut	ants (HAPs) List		
Methanol (CAS 67-56-1) Clean Air Act (CAA) Section	112(r) Accidental Release	e Prevention (40 CFR 68	130)	
Not regulated.	(.)			
Safe Drinking Water Act	Not regulated.			
(SDWA)	· · · · · · · · · · · · · · · · · · ·			
US state regulations	WARNING: This product of defects or other reproduct		n to the State of California to cause birth	

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance Quartz (SiO2) (CAS 14808-60-7) Listed: October 1, 1988 US - California Proposition 65 - CRT: Listed date/Developmental toxin Methanol (CAS 67-56-1) Listed: March 16, 2012 US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a)) Methanol (CAS 67-56-1) Output (OiO2) (OAD 44000 00 7)

Quartz (SiO2) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (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)	Yes
Korea	Existing Chemicals List (ECL)	Yes
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	Yes

*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).

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

Issue date	01-23-2018
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	This document has undergone significant changes and should be reviewed in its entirety.