Hydrazine, Formaldehyde SDS

SECTION 1: IDENTIFICATION

Revision Date: 06/13/2017

Product Name: Hydrazine (HZ), Monomethyl hydrazine (MMH), Unsymmetrical Dimethylhydrazine (UDMH), or Formaldehyde Sensor.

Company: Interscan Corporation
4590 Ish Dr., #110
Simi Valley, CA. 93063
United States

Interscan Corporation: (818) 882-2331

Emergency Contact: (805) 501-7551

Recommended use: For use only in Interscan Monitors or Interscan OEMs in good standing.

SECTION 2: HAZARD(S) IDENTIFICATION

Single word **Warning**

Hazard statement(s)

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H351	Suspected of causing cancer

Precautionary statement(s)

P260	Do not breathe dust or mist.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/ container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIANTS

INGREDIENT	CAS NUMBER	% (WEIGHT)
Caesium Hydroxide Monohydrate	**35103-79-8**	**Proprietary**
Biopersistent glass microfiber	**Not Assigned**	**<33%**
HIVAL® PS HI 5308M	**Not Assigned**	**<38%**

SECTION 4: FIRST-AID MEASURES

Electrolyte (liquid) contact with skin	Rinse well with water.
Electrolyte (liquid) contact with eyes	Remove contact lens and immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media	Use water spray, alcohol resistant foam, dry chemical.
Special protective equipment for Firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
Hazardous combustion products	Carbon Oxides

SECTION 6: ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up	Avoid breathing vapors. Take up mechanically without creating dust. Neutralize with mild acid solution. Clean area with water.

SECTION 7: HANDLING AND STORAGE

Storage	Store in cool, dry, well-ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Glass Microfiber Components workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Biopersistent glass microfiber	Not Assigned	TWA	1 fibre/cm3	ACGIH
Nuisance dust	Not Assigned	TWA (Total particulate)	15 mg/m3	OSHA
		TWA (Respirable fraction)	5 mg/m3	OSHA

Caesium Hydroxide Components workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Caesium hydroxide monohydrate	35103-79-8	TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Eye irritation Skin irritation		
		TWA	2 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract irritation Eye irritation Skin irritation		
		TWA	2.000000 mg/m3	USA. NIOSH Recommended Exposure Limits
		PEL	2 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical Properties:

I] Caesium Hydroxide

a)	Appearance	Form: powder Color: white
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	pH	14 at 500 g/L at 20°C (68°F)
e)	Melting Point/freezing	Melting Point: 272°C (522°F)

	point	
f)	Initial boiling point and	No data available
g)	Flash Point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor Pressure	No data available
l)	Vapor density	No data available
m)	Relative density	3.68 g/ml at 25 °C (77°F)
n)	Water solubility	No data available
o)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

II] Biopersistent glass microfiber

a)	Appearance	Fiber Glass Color: white
b)	Odor	odorless
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting Point/freezing point	No data available
f)	Initial boiling point and	No data available
g)	Flash Point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor Pressure	No data available
l)	Vapor density	No data available
m)	Relative density	No data available
n)	Water solubility	No data available
o)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition	No data available

	temperature	
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

III] HIVAL® PS HI 5308M

a)	Appearance	Form: Solid Color: Black
b)	Odor	faint
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting Point/freezing point range	79 - 135°C (174- 275°F)
f)	Initial boiling point and	No data available
g)	Flash Point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor Pressure	No data available
l)	Vapor density	No data available
m)	Relative density	1.03 -1.05 @ 20 – 25 °C (68 - 77°F)
n)	Water solubility	insoluble
o)	Partition coefficient: n-octanol/water	No data available
p)	Auto-ignition temperature	400°C (752°F)
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

SECTION 10: STABILITY AND REACTIVITY

I] Caesium Hydroxide

Reactivity:	No data available
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No data available

	Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions. - Cesium/cesium oxides
	Other decomposition products:	No data available

II] Biopersistent glass microfiber

Reactivity :	No decomposition if stored and applied as directed.
Chemical stability :	No decomposition if stored and applied as directed.
Possibility of hazardous reactions:	Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid :	No data available

III] HIVAL® PS HI 5308M

Reactivity:	No Dangerous reaction known under conditions of normal use.
Chemical stability:	Stable under normal conditions
Possibility of hazardous reactions:	Stable under normal conditions
Conditions to avoid:	Keep away from heat and flame

SECTION 11: TOXICOLOGICAL INFORMATION

I] Caesium Hydroxide

Acute toxicity:	LD50 Oral - Rat - 570 mg/kg Inhalation: No data available Dermal: No data available
Skin corrosion/irritation:	Skin - Rabbit Result: Skin irritation - 24 h
Serious eye damage/eye irritation:	Eyes - Rabbit Result: Severe eye irritation - 5 min
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity:	No data available
Specific target organ toxicity - single exposure:	No data available
Specific target organ toxicity - repeated exposure:	No data available
Aspiration hazard:	No data available
Additional Information	
RTECS:	Not available
	Cough, Shortness of breath, Headache, Nausea, Vomiting

II] Biopersistent glass microfiber

IARC Group 3:	Not classifiable as to its carcinogenicity to humans Biopersistent glass microfiber
OSHA:	Suspected human carcinogen
NTP:	Reasonably anticipated to be a human carcinogen

III] HIVAL® PS HI 5308M

Acute oral toxicity:	The substance or mixture has no acute oral toxicity
Acute Inhalation toxicity:	The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity:	The substance or mixture has no acute dermal toxicity
Serious eye damage/irritation:	No eye irritation
Respiratory or skin sensitization:	Does not cause respiratory or skin sensitization
Germ cell mutagenicity:	Classification not possible
Carcinogenicity:	Not classifiable as a human carcinogen
Reproductive toxicity:	No toxicity to reproduction
Specific Target Organ Toxicity	
-single exposure:	No data available
-repeated exposure	No data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Other adverse effects	No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of residual product: In accordance with local and national regulations.

SECTION 14: TRANSPORT INFORMATION

International transport regulations

These products are not classified as dangerous goods according to international transport regulations.

SECTION 15: REGULATORY INFORMATION

SARA 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III, Section 313.

SARA 304 Extremely Hazardous Substances Reportable Quantity This material does not contain any components with a section 304 EHS RQ. This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

Massachusetts Right To Know Components
Caesium hydroxide monohydrate
CAS-No.
35103-79-8
Revision Date
1994-04-01

Pennsylvania Right To Know Components
Caesium hydroxide monohydrate
CAS-No.
35103-79-8
Revision Date
1994-04-01

New Jersey Right To Know Components
Caesium hydroxide monohydrate
CAS-No.
35103-79-8
Revision Date
1994-04-01

California Prop. 65 Components WARNING! This product contains a chemical known to the State of California to cause cancer.

Glass wool fibers (inhalable and biopersistent)
Not Assigned

CERCLA Reportable Quantity This material does not contain any components with a CERCLA RQ.

DSL:	All components of this product are on the Canadian DSL.

SECTION 16: OTHER INFORMATION

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.