

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

073298015

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

073298023

**Safety Data Sheet**

Form No. A325

Date Prepared: 7/7/2015

**SECTION 1 : Identification of the substance/preparation and of the company / undertaking****(a) GHS product identifier**

Resilience

**(e) Emergency phone number**

CHEMTRAC 1-800-424-9300

**(b) Other means of identification**

NA

**(c) Recommended use of the chemical and restrictions on use**

For professional dental applications.

**(d) Supplier's details**

Garreco, LLC.  
430 Hiram Road  
Heber Springs, AR 72543  
Phone: 1-800-334-1443

**SECTION 2: Hazards identification****(a) GHS classification of the substance/mixture****Substance Name**

1. Undisclosed due to Confidential Business Information (CBI)
2. Crystalline Silica

**(b) Label Elements****Hazard statements**

Causes damage to the lungs through prolonged or repeat exposure through inhalation.

**Precautionary statements**

Do not breathe dust.

Do not eat, drink, or smoke when using this product.

In case of inadequate ventilation wear respiratory protection.

**Response****IF ON SKIN:** Wash off with plenty of water. If skin irritation continues, consult a doctor.**IF INHALED:** Supply fresh air; consult doctor in case of complaints.**IF SWALLOWED:** Rinse out mouth. If symptoms persist consult doctor.**IF IN EYES:** Rinse opened eye for several minutes under running water.**Storage**

Store in a dry, well-ventilated area.

**Disposal**

If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations.

**Hazard Symbol(s)**

Health Hazard

**Signal Word(s)**

Danger

**(c) Other hazards which do not result in classification**

IARC - International Agency for Research on Cancer: 1- Carcinogenic to humans; NTP National Toxicology Program (Health and Human Services Dept., Public Health Service, NIH/NIEHS): 1- Known to be carcinogen  
ACGIH American Conference of Governmental Industrial Hygienists: A2 Suspected human carcinogen  
CAL-65: Listed as Chemical know to the State of California to Cause Cancer

**SECTION 3: Composition/information on ingredients****(a) Chemical(s) Identity:****(b) Common Name:**

Undisclosed due to Confidential Business Information  
Crystalline Silica

**(c) CAS No.**

NA  
14464-46-1

**Mixture:****Concentration (Percentage)**

65-50%  
35-50%

**SECTION 4: First-aid measures****(a) Description of first aid measures:**

**IF ON SKIN (or hair):** Use moisture renewing lotions if dryness occurs.

**IF INHALED:** Remove to fresh air. Blow nose to evacuate dust.

**IF SWALLOWED:** Drink generous amounts of water to reduce bulk and drying effects. Consult a physician if you feel unwell.

**IF IN EYES:** Flush eyes with water or eye rinse solution. Consult a physician if irritation persists.

**(b) Most important symptoms and effects, both acute and delayed:**

**IF INHALED:** Nuisance conditions. Labored breathing may occur after excessive inhalation.

**IN EYES:** If burning, redness, itching, pain or other symptoms persist or develop, consult a physician.

**(c) Indication of any immediate medical attention and special treatment needed:**

ND

**SECTION 5: Fire-fighting measures****(a) Suitable extinguishing media:**

Not applicable, the material is not flammable.

**(b) Special hazards arising from the chemical or mixture:**

Not applicable, the material is not flammable.

**(c) Special protective equipment and precautions for fire-fighters:**

Not applicable, the material is not flammable.

**SECTION 6: Accidental release measures****(a) Personal precautions, protective equipment and emergency procedures:**

No special precautions. Wear appropriate personal protective equipment.

**(b) Environmental precautions:**

Toxicity studies performed with fish, aquatic invertebrates and aquatic plants showed no toxic effect.

**(c) Methods and material for containment and cleaning up:**

Remove by dry-sweeping or vacuum. Avoid creating excessive dust. Do not wash down drains; it could clog.

**SECTION 7: Handling and storage****(a) Precautions for safe handling:**

Can release dust in handling or during use. Eye, skin, nose, throat, and upper respiratory irritation may occur.

**(b) Conditions for safe storage, including any incompatibilities:**

Store in a dry area to minimize potential for clumping due to moisture absorption.

**SECTION 8: Exposure controls/Personal protection****(a) Control parameters:**

Chemical	ACGIH	OSHA
	TLV	PEL TWA
CBI	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> total, 5 mg/m <sup>3</sup> respirable
Crystalline Silica	0.1 mg/m <sup>3</sup> respirable	0.1 mg/m <sup>3</sup> respirable

**(b) Appropriate Engineering Controls:**

Ventilate to keep exposures below TLV requirements. General ventilation is expected to be satisfactory. Use local exhaust ventilation if necessary.

**(c) Individual protection measures:**

**RESPIRATORY:** Appropriate respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present.

**OTHER PROTECTIVE MEASURES:** Avoid breathing dust. Avoid contact with eyes. Wash hands after handling and before eating or drinking. No special body protection is required under typical circumstances of use and handling.

**Safety Data Sheet**

Form No. A325

**Date Prepared:****7/7/2015****SECTION 9: Physical and chemical properties**

(a) Appearance:	White to off-white powder
(b) Odor:	None
(c) Odor threshold:	ND
(d) pH:	10
(e) Melting point / freezing point:	1,300 °C
(f) Initial boiling point and boiling range:	ND
(g) Flash point	Not Combustible
(h) Evaporation rate (BuAc=1):	ND
(i) Flammability:	ND
(j) Upper/lower flammability or explosive limits:	ND
(k) Vapor Pressure:	ND
(l) Vapor density:	ND
(m) Relative density:	2.3
(n) Solubility:	<1%
(o) Partition coefficient: n-octanol/water:	ND
(p) Auto-ignition temperature:	ND
(q) Decomposition temperature:	1,300 °C
(r) Viscosity:	ND

**SECTION 10: Stability and reactivity**

(a) Reactivity:	Not reactive, HMIS 0
(b) Chemical stability:	Stable
(c) Possibility of hazardous reactions:	Low
(d) Conditions to avoid:	Incompatible with Acids.
(f) Hazardous decomposition products:	Decomposes to Calcium Oxide and Sulfur Dioxide at 1,450 °C.

**SECTION 11: Toxicological information**

Acute toxicity	NA
Skin corrosion/irritation	May cause dryness and irritation if prolonged exposure.
Serious Eye Damage / Irritation	may cause irritation.
Respiratory or skin sensitization	Can cause dryness of the nasal passage and lung congestion.
Germ cell mutagenicity	NA
Carcinogenicity	Crystalline silica, when inhaled as respirable dust, has been classified as carcinogenic to humans over prolonged and sustained exposure.
Reproductive toxicity	NA
STOT-single exposure	NA
STOT-repeated exposure	Inhalation of respirable silica may contribute to respiratory silicosis.
Aspiration Hazard	NA

(a) Exposure route:	Inhalation, skin and/or eye contact.
(b) Symptoms related to the physical, chemical and toxicological characteristics:	Difficulty breathing, rashes or irritations.
(c) Delayed and immediate effects and also chronic effects from short and long tem exposure:	Difficulty breathing, rashes or irritations.
(d) Numerical measures of toxicity:	See control parameters above.

**SECTION 12: Ecological information**

(a) Ecotoxicity:	ND
(b) Persistence and degradability:	ND
(c) Bioaccumulative potential	ND
(d) Mobility in soil:	ND
(e) Other adverse effects:	Possible natural insecticide.

**Safety Data Sheet**

Form No. A325

**Date Prepared: 7/7/2015****SECTION 13: Disposal considerations****Product:****Recommendation**

Dispose of material in accordance with all applicable federal, state and local regulations, typically solid waste disposal common to landfill type operations.

**SECTION 14: Transport information****(a) UN Number**

This product is not regulated as a hazardous material by neither the United States (DOT) Transportation Regulations nor Canadian Transportation of Dangerous Goods.

**(b) UN Proper shipping name**

NA

**(c) Transport hazard class(es)**

NA

**(d) Packing Group**

NA

**(e) Environmental hazards**

NA

**(f) Transport in bulk**

NA

**(g) Other Information**

NA

**SECTION 15: Regulatory information****SARA Reporting Requirements:**

NA

**SARA Threshold Planning Quantity:**

NA

**TSCA Inventory Status:**

ND

**Other Federal Requirements:**

NA

**Other Canadian Regulations:**

Crystalline silica is classified as a D2A substance.

**State Regulatory Information:**

NA

**SECTION 16: Other information****PREPARED BY:**

Kathryn Harris

**GAR QMS SDS REFERENCE:**

A036

**HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:**

Health	0
Flammability	0
Reactivity	0
Other	NA

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATING:**

Health	0
Flammability	0
Reactivity	0
Other	NA

**REVISION NUMBER:**

150707

**CHANGES FROM PREVIOUS VERSION:**

Formatting change. Added response to label elements.

**Safety Data Sheet**

Form No. A325

**Date Prepared:****7/7/2015****ABBREVIATIONS**

NA Not Applicable  
ND Not Determined  
NE Not Established  
ppm parts per million  
G Gallon  
mg Milligram  
L Liter  
gm Gram  
mol Mole  
kg Kilogram  
μ Micro  
mm Millimeter  
p Pico  
Pa Pascals  
c cento  
LC Lethal Concentration  
ACGIH American Conference of Governmental Industrial Hygienist  
DSL Canadian Domestic Substances List  
NDSL Canadian Non-domestic Substance List  
IARC International Agency for Research for Cancer  
OSHA Occupational Safety and Health Administration

LD Lethal Dose  
TC Toxic Concentration  
TD Toxic Dose  
BOD Biological Oxygen Demand  
COD Chemical Oxygen Demand  
Lo Lowest  
ThOD Theoretical Oxygen Demand  
TLm Threshold Limit  
IC Inhibitory Concentration  
DOC Dissolved Organic Carbon  
H Hours  
M Months  
D Days  
Y Years  
W Weeks  
CPR Controlled Product's Regulation  
NOEL No Observed Effect Level  
NOAEL No Observed Adverse Effect Level  
PEL Permissible Exposure Limit  
TLV Threshold Limit Value

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200) OF CHEMICALS AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING REVISION 5. ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED.

THE ABOVE INFORMATION MAY BE BASED IN PART ON INFORMATION PROVIDED BY COMPONENT SUPPLIERS AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE OF THE MATERIAL, OR THE HAZARDS CONNECTED WITH SUCH USE. SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR, AND SINCE DATA MADE AVAILABLE SUBSEQUENT TO THE DATE HEREOF MAY SUGGEST MODIFICATION OF THE INFORMATION, WE ASSUME NO RESPONSIBILITY FOR THE RESULT OF ITS USE. THIS INFORMATION AND MATERIAL IS FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING IT SHALL MAKE HIS/HER OWN DETERMINATION AS TO THE SUITABILITY OF THE MATERIAL FOR HIS/HER PARTICULAR PURPOSE AND ON THE CONDITION THAT HE/SHE ASSUME THE RISK OF HIS/HER USE THEREOF.

**Safety Data Sheet**

Form No. A433

Date Prepared: 3/30/2016

**SECTION 1 : Identification of the substance/preparation and of the company / undertaking****(a) GHS product identifier**

Resilience

**(e) Emergency phone number**

CHEMTRAC 1-800-424-9300

**(b) Other means of identification**

NA

**(c) Recommended use of the chemical and restrictions on use**

For professional dental applications.

**(d) Supplier's details**

Garreco, LLC.  
430 Hiram Road  
Heber Springs, AR 72543  
Phone: 1-800-334-1443

**SECTION 2: Hazards identification****(a) GHS classification of the substance/mixture****Substance Name**

1. Undisclosed due to Confidential Business Information (CBI)
2. Crystalline Silica

**(b) Label Elements****Hazard statements**

Harmful if inhaled.

**Precautionary statements**

Do not breathe dust.

Do not eat, drink, or smoke when using this product.

In case of inadequate ventilation wear respiratory protection.

**Response****IF ON SKIN:** Wash off with plenty of water. If skin irritation continues, consult a doctor.**IF INHALED:** Supply fresh air; consult doctor in case of complaints.**IF SWALLOWED:** Rinse out mouth. If symptoms persist consult doctor.**IF IN EYES:** Rinse opened eye for several minutes under running water.**Storage**

Store in a dry, well-ventilated area.

**Disposal**

If this material as supplied becomes a waste, use solid waste disposal common to landfill type operations.

**Hazard Symbol(s)**

Health Hazard

**Signal Word(s)**

Danger

**(c) Other hazards which do not result in classification**

IARC - International Agency for Research on Cancer: 1- Carcinogenic to humans; NTP National Toxicology Program (Health and Human Services Dept., Public Health Service, NIH/NIEHS): 1- Known to be carcinogen  
ACGIH American Conference of Governmental Industrial Hygienists: A2 Suspected human carcinogen  
CAL-65: Listed as Chemical known to the State of California to Cause Cancer

**SECTION 3: Composition/information on ingredients****(a) Chemical(s) Identity:****(b) Common Name:**

Undisclosed due to Confidential Business Information  
Crystalline Silica

**(c) CAS No.**

NA  
14464-46-1

**Mixture:****Concentration (Percentage)**

65-50%  
35-50%

**SECTION 4: First-aid measures****(a) Description of first aid measures:**

**IF ON SKIN (or hair):** Use moisture renewing lotions if dryness occurs.

**IF INHALED:** Remove to fresh air. Blow nose to evacuate dust.

**IF SWALLOWED:** Drink generous amounts of water to reduce bulk and drying effects. Consult a physician if you feel unwell.

**IF IN EYES:** Flush eyes with water or eye rinse solution. Consult a physician if irritation persists.

**(b) Most important symptoms and effects, both acute and delayed:**

**IF INHALED:** Nuisance conditions. Labored breathing may occur after excessive inhalation.

**IN EYES:** If burning, redness, itching, pain or other symptoms persist or develop, consult a physician.

**(c) Indication of any immediate medical attention and special treatment needed:**

ND

**SECTION 5: Fire-fighting measures****(a) Suitable extinguishing media:**

Not applicable, the material is not flammable.

**(b) Special hazards arising from the chemical or mixture:**

Not applicable, the material is not flammable.

**(c) Special protective equipment and precautions for fire-fighters:**

Not applicable, the material is not flammable.

**SECTION 6: Accidental release measures****(a) Personal precautions, protective equipment and emergency procedures:**

No special precautions. Wear appropriate personal protective equipment.

**(b) Environmental precautions:**

Toxicity studies performed with fish, aquatic invertebrates and aquatic plants showed no toxic effect.

**(c) Methods and material for containment and cleaning up:**

Remove by dry-sweeping or vacuum. Avoid creating excessive dust. Do not wash down drains; it could clog.

**SECTION 7: Handling and storage****(a) Precautions for safe handling:**

Can release dust in handling or during use. Eye, skin, nose, throat, and upper respiratory irritation may occur.

**(b) Conditions for safe storage, including any incompatibilities:**

Store in a dry area to minimize potential for clumping due to moisture absorption.

**SECTION 8: Exposure controls/Personal protection****(a) Control parameters:**

Chemical	ACGIH	OSHA
	TLV	PEL TWA
CBI	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup> total, 5 mg/m <sup>3</sup> respirable
Crystalline Silica	0.05 mg/m <sup>3</sup> respirable	0.05 mg/m <sup>3</sup> respirable

**(b) Appropriate Engineering Controls:**

Ventilate to keep exposures below TLV requirements. General ventilation is expected to be satisfactory. Use local exhaust ventilation if necessary.

**(c) Individual protection measures:**

**RESPIRATORY:** Appropriate respirators fitted with filters certified to standard 42CFR84 under series N95 should be worn when dust is present.

**OTHER PROTECTIVE MEASURES:** Avoid breathing dust. Avoid contact with eyes. Wash hands after handling and before eating or drinking. No special body protection is required under typical circumstances of use and handling.



**Safety Data Sheet**

Form No. A433

Date Prepared: 3/30/2016

**SECTION 9: Physical and chemical properties**

(a) Appearance:	White to off-white powder
(b) Odor:	None
(c) Odor threshold:	ND
(d) pH:	10
(e) Melting point / freezing point:	1,300 °C
(f) Initial boiling point and boiling range:	ND
(g) Flash point	Not Combustible
(h) Evaporation rate (BuAc=1):	ND
(i) Flammability:	ND
(j) Upper/lower flammability or explosive limits:	ND
(k) Vapor Pressure:	ND
(l) Vapor density:	ND
(m) Relative density:	2.3
(n) Solubility:	<1%
(o) Partition coefficient: n-octanol/water:	ND
(p) Auto-ignition temperature:	ND
(q) Decomposition temperature:	1,300 °C
(r) Viscosity:	ND

**SECTION 10: Stability and reactivity**

(a) Reactivity:	Not reactive, HMIS 0
(b) Chemical stability:	Stable
(c) Possibility of hazardous reactions:	Low
(d) Conditions to avoid:	Incompatible with Acids.
(f) Hazardous decomposition products:	Decomposes to Calcium Oxide and Sulfur Dioxide at 1,450 °C.

**SECTION 11: Toxicological information**

Acute toxicity	NA
Skin corrosion/irritation	May cause dryness and irritation if prolonged exposure.
Serious Eye Damage / Irritation	may cause irritation.
Respiratory or skin sensitization	Can cause dryness of the nasal passage and lung congestion.
Germ cell mutagenicity	NA
Carcinogenicity	Crystalline silica, when inhaled as respirable dust, has been classified as carcinogenic to humans over prolonged and sustained exposure.
Reproductive toxicity	NA
STOT-single exposure	NA
STOT-repeated exposure	Inhalation of respirable silica may contribute to respiratory silicosis.
Aspiration Hazard	NA

(a) Exposure route:	Inhalation, skin and/or eye contact.
(b) Symptoms related to the physical, chemical and toxicological characteristics:	Difficulty breathing, rashes or irritations.
(c) Delayed and immediate effects and also chronic effects from short and long tem exposure:	Difficulty breathing, rashes or irritations.
(d) Numerical measures of toxicity:	See control parameters above.

**SECTION 12: Ecological information**

(a) Ecotoxicity:	ND
(b) Persistence and degradability:	ND
(c) Bioaccumulative potential	ND
(d) Mobility in soil:	ND
(e) Other adverse effects:	Possible natural insecticide.

**Safety Data Sheet**

Form No. A433

**Date Prepared: 3/30/2016****SECTION 13: Disposal considerations****Product:****Recommendation**

Dispose of material in accordance with all applicable federal, state and local regulations, typically solid waste disposal common to landfill type operations.

**SECTION 14: Transport information****(a) UN Number**

This product is not regulated as a hazardous material by neither the United States (DOT) Transportation Regulations nor Canadian Transportation of Dangerous Goods.

**(b) UN Proper shipping name**

NA

**(c) Transport hazard class(es)**

NA

**(d) Packing Group**

NA

**(e) Environmental hazards**

NA

**(f) Transport in bulk**

NA

**(g) Other Information**

NA

**SECTION 15: Regulatory information****SARA Reporting Requirements:**

NA

**SARA Threshold Planning Quantity:**

NA

**TSCA Inventory Status:**

ND

**Other Federal Requirements:**

NA

**Other Canadian Regulations:**

Crystalline silica is classified as a D2A substance.

**State Regulatory Information:**

NA

**SECTION 16: Other information****PREPARED BY:**

Kathryn Harris

**GAR QMS SDS REFERENCE:**

A036

**HAZARDOUS MATERIAL IDENTIFICATION (HMIS) RATING:**

Health	0
Flammability	0
Reactivity	0
Other	NA

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATING:**

Health	0
Flammability	0
Reactivity	0
Other	NA

**REVISION NUMBER:**

160330

**CHANGES FROM PREVIOUS VERSION:**

Original version

**Safety Data Sheet**

Form No. A433

Date Prepared: 3/30/2016

**ABBREVIATIONS**

NA Not Applicable  
ND Not Determined  
NE Not Established  
ppm parts per million  
G Gallon  
mg Milligram  
L Liter  
gm Gram  
mol Mole  
kg Kilogram  
μ Micro  
mm Millimeter  
p Pico  
Pa Pascals  
c cento  
LC Lethal Concentration

ACGIH American Conference of Governmental Industrial Hygienist  
DSL Canadian Domestic Substances List  
NDSL Canadian Non-domestic Substance List  
IARC International Agency for Research for Cancer  
OSHA Occupational Safety and Health Administration

LD Lethal Dose  
TC Toxic Concentration  
TD Toxic Dose  
BOD Biological Oxygen Demand  
COD Chemical Oxygen Demand  
Lo Lowest  
ThOD Theoretical Oxygen Demand  
TLm Threshold Limit  
IC Inhibitory Concentration  
DOC Dissolved Organic Carbon  
H Hours  
M Months  
D Days  
Y Years  
W Weeks  
CPR Controlled Product's Regulation  
NOEL No Observed Effect Level  
NOAEL No Observed Adverse Effect Level  
PEL Permissible Exposure Limit  
TLV Threshold Limit Value

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200) OF CHEMICALS AND THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING REVISION 5. ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED. THE ABOVE INFORMATION MAY BE BASED IN PART ON INFORMATION PROVIDED BY COMPONENT SUPPLIERS AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE OF THE MATERIAL, OR THE HAZARDS CONNECTED WITH SUCH USE. SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR, AND SINCE DATA MADE AVAILABLE SUBSEQUENT TO THE DATE HEREOF MAY SUGGEST MODIFICATION OF THE INFORMATION, WE ASSUME NO RESPONSIBILITY FOR THE RESULT OF ITS USE. THIS INFORMATION AND MATERIAL IS FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING IT SHALL MAKE HIS/HER OWN DETERMINATION AS TO THE SUITABILITY OF THE MATERIAL FOR HIS/HER PARTICULAR PURPOSE AND ON THE CONDITION THAT HE/SHE ASSUME THE RISK OF HIS/HER USE THEREOF.