



SAFETY DATA SHEET

1. Identification

Product identifier	Food Zone Silicone Sealant - Aluminum (cartridge)
Other means of identification	
Product code	No. 14088 (Item# 1004824)
Recommended use	Sealant and adhesive
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufactured or sold by:	
Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency	800-424-9300 (US)
(CHEMTREC)	703-527-3887 (International)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Hazardous to the aquatic environment, acute hazard Category 3 Hazardous to the aquatic environment, long-term hazard Category 3
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	Harmful to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. Avoid release to the environment.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	

When heated to temperature above 300°F/150°C in the presence of air, product may form formaldehyde vapors. When exposed to water or humid air, product evolves acetic acid (HOAc).

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
polydimethylsiloxane, hydroxy-terminated		70131-67-8	70 - 90

Chemical name	Common name and synonyms	CAS number	%
amorphous silica		7631-86-9	5 - 10
distillates (petroleum), hydrotreated middle		64742-46-7	5 - 10
aluminum		7429-90-5	1 - 3
iron oxide		1309-37-1	1 - 3
titanium dioxide		13463-67-7	1 - 3
carbon black		1333-86-4	< 1

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air. Get medical attention if symptoms occur.
Skin contact	Wash with water and soap as a precaution. Get medical attention if symptoms occur.
Eye contact	Flush eyes with water as a precaution. If eye irritation persists: Get medical advice/attention.
Ingestion	If swallowed, do NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
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	Water. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved.
General fire hazards	No unusual fire or explosion hazards noted.

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	Prevent product from entering drains. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Use care in handling/storage. For product usage instructions, see the product label.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

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.

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

Components	Type	Value	Form
aluminum (CAS 7429-90-5)	PEL	5 mg/m ³ 15 mg/m ³	Respirable fraction. Total dust.
carbon black (CAS 1333-86-4)	PEL	3.5 mg/m ³	
distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	PEL	5 mg/m ³	Mist.
		400 mg/m ³ 100 ppm	
iron oxide (CAS 1309-37-1)	PEL	10 mg/m ³	Fume.
titanium dioxide (CAS 13463-67-7)	PEL	15 mg/m ³	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
aluminum (CAS 7429-90-5)	TWA	5 mg/m ³ 15 mg/m ³ 50 mppcf 15 mppcf	Respirable fraction. Total dust. Total dust. Respirable fraction.
amorphous silica (CAS 7631-86-9)	TWA	0.8 mg/m ³	
		20 mppcf	
iron oxide (CAS 1309-37-1)	TWA	5 mg/m ³ 15 mg/m ³ 50 mppcf 15 mppcf	Respirable fraction. Total dust. Total dust. Respirable fraction.
titanium dioxide (CAS 13463-67-7)	TWA	5 mg/m ³	Respirable fraction.
		15 mg/m ³ 50 mppcf 15 mppcf	Total dust. Total dust. Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
aluminum (CAS 7429-90-5)	TWA	1 mg/m ³	Respirable fraction.
carbon black (CAS 1333-86-4)	TWA	3 mg/m ³	Inhalable fraction.
distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	TWA	5 mg/m ³	Inhalable fraction.
iron oxide (CAS 1309-37-1)	TWA	5 mg/m ³	Respirable fraction.
titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
aluminum (CAS 7429-90-5)	TWA	5 mg/m ³ 5 mg/m ³ 10 mg/m ³	Welding fume or pyrophoric powder. Respirable. Total
amorphous silica (CAS 7631-86-9)	TWA	6 mg/m ³	
carbon black (CAS 1333-86-4)	TWA	0.1 mg/m ³	
distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	STEL	10 mg/m ³	Mist.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
iron oxide (CAS 1309-37-1)	TWA TWA	5 mg/m ³ 5 mg/m ³	Mist. Dust and fume.
Biological limit values	No biological exposure limits noted for the ingredient(s).		
Exposure guidelines	Occupational Exposure Limits are not relevant to the current physical form of the product.		
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. Provide eyewash station.		
Individual protection measures, such as personal protective equipment			
Eye/face protection	Wear safety glasses with side shields (or goggles).		
Skin protection			
Hand protection	Wear protective gloves such as: Nitrile. Butyl rubber.		
Other	Wear appropriate chemical resistant clothing.		
Respiratory protection	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
General hygiene considerations	Observe any medical surveillance requirements. When using do not smoke. 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. Contaminated work clothing should not be allowed out of the workplace.		

9. Physical and chemical properties**Appearance****Physical state** Solid, Liquid.**Form** Paste.**Color** Aluminum.**Odor** Acetic acid.**Odor threshold** Not available.**pH** Not available.**Melting point/freezing point** Not available.**Initial boiling point and boiling range** 680 °F (360 °C) estimated**Flash point** > 212 °F (> 100 °C) Closed Cup**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.**Vapor pressure** 791.8 hPa estimated**Vapor density** Not available.**Relative density** 1.01**Solubility (water)** Not available.**Partition coefficient (n-octanol/water)** Not available.**Auto-ignition temperature** 500 °F (260 °C) estimated**Decomposition temperature** Not available.**Viscosity (kinematic)** Not available.

Percent volatile Not available.

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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials. When heated to temperature above 300°F/150°C in the presence of air, product may form formaldehyde vapors. When exposed to water or humid air, product evolves acetic acid (HOAc).
Incompatible materials	Strong oxidizing agents. Water, moisture.
Hazardous decomposition products	Carbon oxides. Silicone dioxide. Formaldehyde. Metal oxides. Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Health injuries are not known or expected under normal use.

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.

Components	Species	Test Results
amorphous silica (CAS 7631-86-9)		
Acute		
Oral		
LD50	Rat	> 22500 mg/kg
carbon black (CAS 1333-86-4)		
Acute		
Oral		
LD50	Rat	> 8000 mg/kg
titanium dioxide (CAS 13463-67-7)		
Acute		
Dermal		
LD50	Rabbit	> 10000 mg/kg
Oral		
LD50	Rat	> 10000 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
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	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

amorphous silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
iron oxide (CAS 1309-37-1)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	This 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 exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
aluminum (CAS 7429-90-5)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.16 mg/l, 96 hours
distillates (petroleum), hydrotreated middle (CAS 64742-46-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
titanium dioxide (CAS 13463-67-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
<i>Acute</i>			
Fish	LC50	Fathead minnow (Pimephales promelas)	1000 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability

Bioaccumulative potential

Bioconcentration factor (BCF)

titanium dioxide 352

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 of waste from residues / unused products This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

Hazardous waste code Not regulated.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

CERCLA Hazardous Substances: Reportable quantity

Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

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 (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

aluminum (CAS 7429-90-5)
carbon black (CAS 1333-86-4)
distillates (petroleum), hydrotreated middle (CAS 64742-46-7)
titanium dioxide (CAS 13463-67-7)

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

aluminum (CAS 7429-90-5)
carbon black (CAS 1333-86-4)
iron oxide (CAS 1309-37-1)
titanium dioxide (CAS 13463-67-7)

US. Massachusetts RTK - Substance List

aluminum (CAS 7429-90-5)
amorphous silica (CAS 7631-86-9)
carbon black (CAS 1333-86-4)
titanium dioxide (CAS 13463-67-7)

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

aluminum (CAS 7429-90-5)
amorphous silica (CAS 7631-86-9)
carbon black (CAS 1333-86-4)

distillates (petroleum), hydrotreated middle (CAS 64742-46-7)
iron oxide (CAS 1309-37-1)
titanium dioxide (CAS 13463-67-7)

US. Rhode Island RTK

carbon black (CAS 1333-86-4)
iron oxide (CAS 1309-37-1)
titanium dioxide (CAS 13463-67-7)

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.

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 51.100(s)) < 3 %

Consumer products (40 CFR 59, Subpt. C) Not regulated

State

Consumer products This product is regulated as a Sealant and Caulking Compound. This product is compliant for use in all 50 states.

VOC content (CA) < 3 %

VOC content (OTC) < 3 %

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)	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)	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 04-24-2015
Revision date 08-15-2017
Prepared by Allison Yoon
Version # 02
Further information Not available.
HMIS® ratings Health: 1
Flammability: 1
Physical hazard: 0
Personal protection: B
NFPA ratings Health: 1
Flammability: 1
Instability: 0

NFPA ratings**Disclaimer**

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Revision Information

This document has undergone significant changes and should be reviewed in its entirety.