

Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

- Product Name** • **HiTUC**
Product Description • Grey paste with mild odor.

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified use(s)** • Corrosion inhibitor.

1.3 Details of the supplier of the safety data sheet

- Manufacturer** • AFL Telecommunications LLC
 150 Ridgeview Center Drive
 Duncan, SC 29334
 United States
 www.aflglobal.com
Telephone (General) • 1-864-433-0333

1.4 Emergency telephone number

- Manufacturer** • 1-864-433-5577

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
 According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

- CLP**
- Skin Sensitization 1 - H317
 - Eye Irritation 2 - H319
 - Carcinogenicity 2 - H351
 - Hazardous to the aquatic environment Acute 1 - H400
 - Hazardous to the aquatic environment Chronic 1 - H410
- DSD/DPD**
- Irritant (Xi)
 - Carcinogenic Substances - Category 3
 - Dangerous to the Environment (N)
 - R36, R40, R43, R48/23, R50, R53

2.2 Label Elements

CLP

WARNING



- Hazard statements** • H317 - May cause an allergic skin reaction
 H319 - Causes serious eye irritation

H351 - Suspected of causing cancer.
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements

- Prevention**
 - P201 - Obtain special instructions before use.
 - P202 - Do not handle until all safety precautions have been read and understood.
 - P261 - Avoid breathing mist/vapours/spray.
 - P264 - Wash thoroughly after handling.
 - P272 - Contaminated work clothing should not be allowed out of the workplace.
 - P273 - Avoid release to the environment.
 - P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 - P281 - Use personal protective equipment as required.
- Response**
 - P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
 - P321 - Specific treatment, see supplemental first aid information.
 - P363 - Wash contaminated clothing before reuse.
 - P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
 - P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P337+P313 - If eye irritation persists: Get medical advice/attention.
 - P308+P313 - IF exposed or concerned: Get medical advice/attention.
 - P391 - Collect spillage.
- Storage/Disposal**
 - P405 - Store locked up.
 - P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



- Risk phrases**
 - R36 - Irritating to eyes.
 - R40 - Limited evidence of a carcinogenic effect.
 - R43 - May cause sensitisation by skin contact.
 - R48/23 - Toxic: danger of serious damage to health by prolonged exposure through inhalation.
 - R50 - Very toxic to aquatic organisms.
 - R53 - May cause long-term adverse effects in the aquatic environment.
- Safety phrases**
 - S24 - Avoid contact with skin.
 - S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 - S36 - Wear suitable protective clothing.
 - S37 - Wear suitable gloves.
 - S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 - S53 - Avoid exposure - obtain special instructions before use.
 - S57 - Use appropriate containment to avoid environmental contamination.

2.3 Other Hazards

- CLP**
 - According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.
- DSD/DPD**
 - According to European Directive 1999/45/EC this preparation is considered dangerous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012**
 - Skin Sensitization 1A - H317
 - Eye Irritation 2 - H319
 - Respiratory Sensitization 1 - H334
 - Carcinogenicity 2 - H351

Reproductive Toxicity 2 - H361

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements**
- May cause an allergic skin reaction - H317
 - Causes serious eye irritation - H319
 - May cause allergy or asthma symptoms or breathing difficulties if inhaled - H334
 - Suspected of causing cancer. - H351
 - Suspected of damaging fertility or the unborn child. - H361

Precautionary statements

- Prevention**
- Obtain special instructions before use. - P201
 - Do not handle until all safety precautions have been read and understood. - P202
 - Avoid breathing mist/vapours/spray. - P261
 - Wash thoroughly after handling. - P264
 - Contaminated work clothing should not be allowed out of the workplace. - P272
 - Wear protective gloves/protective clothing/eye protection/face protection. - P280
 - User personal protective equipment as required. - P281
 - In case of inadequate ventilation wear respiratory protection. - P285
- Response**
- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P341
 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. - P342+P311
 - If on skin: Wash with plenty of water .
 - IF exposed or concerned: Get medical advice/attention. - P308+P313
 - Specific treatment, see supplemental first aid information. - P321
 - Wash contaminated clothing before reuse. - P363
 - If skin irritation or rash occurs: Get medical advice/attention. - P333+P313
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
 - If eye irritation persists: Get medical advice/attention. - P337+P313
- Storage/Disposal**
- Store locked up. - P405
 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

2.3 Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Other Toxic Effects - D2A
- Other Toxic Effects - D2B

2.2 Label elements

WHMIS



- Other Toxic Effects - D2A
- Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the

Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients**3.1 Substances**

- Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Polydimethyl Siloxane	CAS:63148-62-9	43%	Ingestion/Oral-Rat LD50 • >17 g/kg Skin-Rabbit LD50 • >2 g/kg	EU DSD/DPD: Self Classified - Xi; R36 EU CLP: Self Classified - Eye Irrit. 2, H319 OSHA HCS 2012: Eye Irrit. 2	NDA
Zinc	CAS:7440-66-6 EINECS:231-175-3	31%	NDA	EU DSD/DPD: Annex VI, Table 3.2 - N; R50-53 EU CLP: Annex VI, Table 3.1 - Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Not Classified	NDA
Siloxanes and silicones di-Me, di-Ph	CAS:68083-14-7	7%	Inhalation-Rat LC50 • 18 g/m ³ 1 Hour(s)	EU DSD/DPD: Self Classified - Xi; R36 EU CLP: Self Classified - Eye Irrit. 2, H319 OSHA HCS 2012: Eye Irrit. 2	NDA
Nickel	CAS:7440-02-0 EINECS:231-111-4	7%	NDA	EU DSD/DPD: Annex VI, Table 3.2 - Carc.Cat.3; R40; R43 T; R48/23 EU CLP: Annex VI, Table 3.1 - Carc. 2, H351; STOT RE 1, H372; Skin Sens. 1, H317 OSHA HCS 2012: Carc 2; Skin Sens. 1A; Resp. Sens. 1; Repr. 2	NDA
Aluminum	CAS:7429-90-5 EINECS:231-072-3	7%	NDA	EU DSD/DPD: Annex VI, Table 3.2 - F; R11; R15 EU CLP: Annex VI, Table 3.1 - Water-react. 2, H361; Pyr. Sol. 1, H250 OSHA HCS 2012: STOT RE 2 (Lungs, Inhal); Water React. 2	NDA
Silica, amorphous fumed	CAS:112945-52-5	5%	Ingestion/Oral-Rat LD50 • 3160 mg/kg	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures**4.1 Description of first aid measures****Inhalation**

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.

Skin

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Take off contaminated clothing and wash before reuse. If irritation

develops and persists, get medical attention.

Eye

- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion

- Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • Powder, foam, carbon dioxide.

Unsuitable Extinguishing Media • Water

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- Containers may explode when heated. Some of these materials may burn, but none ignite readily.

Hazardous Combustion Products

- May include, and are not limited to: oxides of carbon and incompletely burned carbon compounds, silicone dioxide, formaldehyde, benzene.

5.3 Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
Wear positive pressure self-contained breathing apparatus (SCBA).
Stay upwind.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas.

Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Eliminate all ignition sources. Stay upwind. Keep out of low areas. Keep unauthorized personnel away. Ventilate closed spaces before entering.

6.2 Environmental precautions

- Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
Carefully shovel or sweep up spilled material and place in suitable container.
LARGE SPILLS: Dike far ahead of spill for later disposal.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal

Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Keep away from heat and ignition sources. Use only with adequate ventilation. Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing mist, vapor, spray. Avoid contact with skin, eyes, and clothing. Do not taste or swallow. Wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool/low-temperature, well-ventilated dry place away from heat and ignition sources. Do not store at temperatures above 49°C / 120°F. Prolonged contact with water may produce hydrogen gas which may reach explosive concentrations in confined spaces.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	NIOSH	OSHA
Aluminum (7429-90-5)	TWAs	1 mg/m3 TWA (respirable fraction)	1 mg/m3 TWA (respirable)	10 mg/m3 TWAEV	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Nickel (7440-02-0)	TWAs	1.5 mg/m3 TWA (inhalable fraction)	1 mg/m3 TWA (inhalable)	1 mg/m3 TWAEV	0.015 mg/m3 TWA	1 mg/m3 TWA

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation 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.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear splash goggles.

Skin/Body

- Wear appropriate gloves.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Gray paste with a mild odor.
Color	Gray	Odor	Mild odor.

Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	1.68 Water=1	Water Solubility	Negligible < 0.1 %
Solvent Solubility	Data lacking	Viscosity	Data lacking
Explosive Properties	Data lacking	Oxidizing Properties:	Data lacking
Volatility			
Vapor Pressure	Data lacking	Vapor Density	> 1 Air=1
Evaporation Rate	Data lacking		
Flammability			
Flash Point	> 300 C(> 572 F)	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Excess heat. Incompatible materials.

10.5 Incompatible materials

- Oxidizers Prolonged contact with water may produce hydrogen gas which may reach explosive concentrations in confined spaces.

10.6 Hazardous decomposition products

- Oxides of carbon and incompletely burned carbon compounds, Silicone dioxide, Formaldehyde, Benzene.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
Siloxanes and silicones di-Me, di-Ph (7%)	68083-14-7	Acute Toxicity: ihl-rat LC50:18 gm/m ³ /1H; Irritation: eye-rbt 100 uL/24H MLD
Polydimethyl Siloxane (43%)	63148-62-9	Acute Toxicity: orl-rat LD50:>24 gm/kg; skn-rbt LD50:>2 gm/kg; Irritation: eye-rbt 100 uL/24H MOD; skn-rbt 500 uL/24H MLD
Nickel (7%)	7440-02-0	Reproductive: orl-rat TDLo:158 mg/kg (multigenerations)
Aluminum (7%)	7429-90-5	Reproductive: orl-mus TDLo:1260 mg/kg (multigeneration))

Zinc (31%)	7440-66-6	Acute Toxicity: ihl-hmn TClO:124 mg/m3/50M; Tumorigen/Carcinogen: orl-mus TDLo:12.600 mg/kg/46W-C
GHS Properties		Classification
Acute toxicity		EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Aspiration Hazard		EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Carcinogenicity		EU/CLP • Carcinogenicity 2 OSHA HCS 2012 • Carcinogenicity 2
Germ Cell Mutagenicity		EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin corrosion/Irritation		EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Skin sensitization		EU/CLP • Skin Sensitizer 1 OSHA HCS 2012 • Skin Sensitizer 1A
STOT-RE		EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
STOT-SE		EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met
Toxicity for Reproduction		EU/CLP • Classification criteria not met OSHA HCS 2012 • Toxic to Reproduction 2
Respiratory sensitization		EU/CLP • Classification criteria not met OSHA HCS 2012 • Respiratory Sensitizer 1
Serious eye damage/Irritation		EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2

Route(s) of entry/exposure

- Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate)

- May cause irritation.

Chronic (Delayed)

- May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin

Acute (Immediate)

- May cause skin sensitization. Symptoms include redness, and skin rash.

Chronic (Delayed)

- No data available.

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- No data available.

Ingestion

Acute (Immediate)

- May cause stomach distress, nausea or vomiting.

Chronic (Delayed)

- No data available.

Carcinogenic Effects

- Repeated and prolonged exposure may cause cancer. Nickel metal IARC/NTP: Listed as "reasonably anticipated to be a human carcinogen" by the NTP. Listed as "possibly carcinogenic" to humans by IARC (Group 2B).

Carcinogenic Effects			
	CAS	IARC	NTP
Nickel	7440-02-0	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen

Nickel as Nickel Compounds	NDA	Group 1-Carcinogenic	Known Human Carcinogen
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Reproductive Effects

- Repeated and prolonged exposure may cause reproductive effects.

Section 12 - Ecological Information

12.1 Toxicity

- Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not regulated	NDA	NDA	NDA
TDG	NDA	Not regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not regulated	NDA	NDA	NDA

14.6 Special precautions for user

- None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not relevant.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Chronic

State Right To Know				
Component	CAS	MA	NJ	PA
Aluminum	7429-90-5	Yes	Yes	Yes
Nickel	7440-02-0	Yes	Yes	Yes
Polydimethyl Siloxane	63148-62-9	No	No	No
Silica, amorphous fumed	112945-52-5	No	No	No
Siloxanes and silicones di-Me, di-Ph	68083-14-7	No	No	No
Zinc	7440-66-6	Yes	Yes	Yes

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
Aluminum	7429-90-5	Yes	No	Yes	No	Yes
Nickel	7440-02-0	Yes	No	Yes	No	Yes
Polydimethyl Siloxane	63148-62-9	Yes	No	No	No	Yes
Silica, amorphous fumed	112945-52-5	Yes	No	No	No	No
Siloxanes and silicones di-Me, di-Ph	68083-14-7	Yes	No	No	No	Yes
Zinc	7440-66-6	Yes	No	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	B6 (powder); Uncontrolled product according to WHMIS classification criteria
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	D2A, D2B; B6, D2A (Raney)
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

Canada - WHMIS - Ingredient Disclosure List

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	1 %
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	0.1 %

• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

Environment

Canada - CEPA - Priority Substances List

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Not Listed
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

Canada New Brunswick

Environment

Canada - New Brunswick - Ozone Depleting Substances - Schedule A

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Not Listed
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

Canada - New Brunswick - Ozone Depleting Substances - Schedule B

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Not Listed
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	F; R11 R15
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Carc.Cat.3; R40 R43 T; R48/23
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed

• Silica, amorphous fumed	112945-52-5	Not Listed
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EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Not Listed
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	F R:11-15 S:(2)-7/8-43
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	T R:40-43-48/23 S:(2)-36/37/39-45
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	T
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	S, 7
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	S:(2)-7/8-43
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	S:(2)-36/37/39-45
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed

• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Not Listed
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Not Listed
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Not Listed
• Nickel as Nickel compounds		(including any unique chemical substance that contains Nickel as part of its infrastructure)
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	100 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 45.4 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	454 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 1000 lb final RQ (no reporting of releases of this

hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)

- Zinc as Zinc compounds
- Silica, amorphous fumed

112945-52-5 Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

- Polydimethyl Siloxane
- Siloxanes and silicones di-Me, di-Ph
- Aluminum
- Aluminum as Aluminum insoluble compounds
- Nickel
- Nickel as Nickel compounds
- Zinc
- Zinc as Zinc compounds
- Silica, amorphous fumed

63148-62-9 Not Listed
 68083-14-7 Not Listed
 7429-90-5 Not Listed
 Not Listed
 7440-02-0 Not Listed
 Not Listed
 7440-66-6 Not Listed
 Not Listed
 112945-52-5 Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

- Polydimethyl Siloxane
- Siloxanes and silicones di-Me, di-Ph
- Aluminum
- Aluminum as Aluminum insoluble compounds
- Nickel
- Nickel as Nickel compounds
- Zinc
- Zinc as Zinc compounds
- Silica, amorphous fumed

63148-62-9 Not Listed
 68083-14-7 Not Listed
 7429-90-5 Not Listed
 Not Listed
 7440-02-0 Not Listed
 Not Listed
 7440-66-6 Not Listed
 Not Listed
 112945-52-5 Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

- Polydimethyl Siloxane
- Siloxanes and silicones di-Me, di-Ph
- Aluminum
- Aluminum as Aluminum insoluble compounds
- Nickel
- Nickel as Nickel compounds
- Zinc
- Zinc as Zinc compounds
- Silica, amorphous fumed

63148-62-9 Not Listed
 68083-14-7 Not Listed
 7429-90-5 Not Listed
 Not Listed
 7440-02-0 Not Listed
 Not Listed
 7440-66-6 Not Listed
 Not Listed
 112945-52-5 Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

- Polydimethyl Siloxane
- Siloxanes and silicones di-Me, di-Ph
- Aluminum
- Aluminum as Aluminum insoluble compounds
- Nickel
- Nickel as Nickel compounds
- Zinc

63148-62-9 Not Listed
 68083-14-7 Not Listed
 7429-90-5 1.0 % de minimis concentration (dust or fume only)
 Not Listed
 7440-02-0 0.1 % de minimis concentration
 0.1 % de minimis concentration (Chemical Category N495)
 7440-66-6 1.0 % de minimis concentration (dust or fume only)

- Zinc as Zinc compounds 1.0 % de minimis concentration (Chemical Category N982)
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5 Not Listed
- Aluminum as Aluminum insoluble compounds Not Listed
- Nickel 7440-02-0 Not Listed
- Nickel as Nickel compounds Not Listed
- Zinc 7440-66-6 Not Listed
- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5 Not Listed
- Aluminum as Aluminum insoluble compounds Not Listed
- Nickel 7440-02-0 Included in waste streams: F006, F039
- Nickel as Nickel compounds Not Listed
- Zinc 7440-66-6 Not Listed
- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5 Not Listed
- Aluminum as Aluminum insoluble compounds Not Listed
- Nickel 7440-02-0 (total)
- Nickel as Nickel compounds Not Listed
- Zinc 7440-66-6 (total)
- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5 Not Listed
- Aluminum as Aluminum insoluble compounds Not Listed
- Nickel 7440-02-0 hazardous constituent - no waste number
- Nickel as Nickel compounds hazardous constituent - no waste number
- Zinc 7440-66-6 Not Listed
- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed

• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	(total)
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	(total)
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	3.98 mg/L (wastewater); 11.0 mg/L TCLP (nonwastewater)
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	2.61 mg/L (wastewater); 4.3 mg/L TCLP (nonwastewater)
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	(total)
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	(total)
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	carcinogen, initial date 10/1/89 (metallic)
• Nickel as Nickel compounds		carcinogen, initial date 5/7/04
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	Not Listed
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed

- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5 Not Listed
- Aluminum as Aluminum insoluble compounds Not Listed
- Nickel 7440-02-0 Not Listed
- Nickel as Nickel compounds Not Listed
- Zinc 7440-66-6 Not Listed
- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5 Not Listed
- Aluminum as Aluminum insoluble compounds Not Listed
- Nickel 7440-02-0 Not Listed
- Nickel as Nickel compounds Not Listed
- Zinc 7440-66-6 Not Listed
- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5 Not Listed
- Aluminum as Aluminum insoluble compounds Not Listed
- Nickel 7440-02-0 Not Listed
- Nickel as Nickel compounds Not Listed
- Zinc 7440-66-6 Not Listed
- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5 Not Listed
- Aluminum as Aluminum insoluble compounds Not Listed
- Nickel 7440-02-0 Not Listed
- Nickel as Nickel compounds Not Listed
- Zinc 7440-66-6 Not Listed
- Zinc as Zinc compounds Not Listed
- Silica, amorphous fumed 112945-52-5 Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

- Polydimethyl Siloxane 63148-62-9 Not Listed
- Siloxanes and silicones di-Me, di-Ph 68083-14-7 Not Listed
- Aluminum 7429-90-5

• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	
• Nickel as Nickel compounds		
• Zinc	7440-66-6	
• Zinc as Zinc compounds		
• Silica, amorphous fumed	112945-52-5	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Polydimethyl Siloxane	63148-62-9	Not Listed
• Siloxanes and silicones di-Me, di-Ph	68083-14-7	Not Listed
• Aluminum	7429-90-5	Not Listed
• Aluminum as Aluminum insoluble compounds		Not Listed
• Nickel	7440-02-0	
• Nickel as Nickel compounds		Not Listed
• Zinc	7440-66-6	Not Listed
• Zinc as Zinc compounds		Not Listed
• Silica, amorphous fumed	112945-52-5	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H250 - Catches fire spontaneously if exposed to air
- H361 - Suspected of damaging fertility or the unborn child.
- H372 - Causes damage to organs through prolonged or repeated exposure.
- R11 - Highly flammable.
- R15 - Contact with water liberates extremely flammable gases.

Last Revision Date

- 11/February/2014

Preparation Date

- 11/February/2014

Disclaimer/Statement of Liability

- INFORMATION HEREIN IS GIVEN IN GOOD FAITH AS AUTHORITATIVE AND VALID; HOWEVER, NO WARRANTY, EXPRESS OR IMPLIED, CAN BE MADE.

Key to abbreviations

NDA = No Data Available