Modified Silicone MSDS DATE: 02/05/2017

FILE NO.:

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Power Seal Silicone - General Purpose.

(Colors).

DISTRIBUTOR: TOOLWAY INDUSTRIES LTD.

ADDRESS: 31 Conair Parkway. Woodbridge, ON, Canada L4H 0S4

Phone: (905) 326-5450 Ext 229. Fax: (905) 326-5451.

EMERGENCY

PHONE: 1 (800) 535 5053

PRODUCT USE: Sealant and adhesive.

PREPARED BY: TOOLWAY INDUSTRIES LTD.

SECTION 1 NOTES: NONE

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification:

Serious eye damage/eye irritation: Category2A

Skin sensitization: Category1

Label Elements Including Precautionary Statements:



Symbol:

Signal Word: Warning Hazard Risk Statement:

- H319 Causes serious eye irritation
- H317 May cause an allergic skin reaction

Precautionary Statement:

Prevention:

- P264 Wash hands thoroughly after handling.
- P280 Wear suitable protective clothing, gloves and eye/face protection.
- P280 A void breathing dust/fume/gas/mist/vapours/spray.
- P272 Contaminated work clothing should not be allowed out of the workplace.

Response:

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P333+P313 If skin irritation occurs, get medical advice/attention.
- P363 Take off contaminated clothing and wash before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: Not applicable

Disposal: Dispose of contents/container by the special waste disposal trader who receives the permission of metropolis and districts governor.

Other Hazard. Risk which are not included in the classification criteria: None known

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SECTION 2 NOTES: NONE

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

NO	Chemical Name	CAS NO	%(w/w	ACGIH TLV
1	Calcium carbonate	471-34-1	40~70	None estab
2	Diisononyl Phthalate	68515-48-0	10~20	None estab
3	N-β(Amino ethyl)r-aminopropyl trimethoxy silane	1760-24-3	0.1~1	None estab
4	Titanium dioxide	13463-67-7	1~5	None estab

SECTION 3 NOTES: NONE

SECTION 4: FIRST AID MEASURES

If in Eyes: Immediately flush with water for 15minutes. Get medical attention

If on Skin: Remove from skin and immediately flush with water for 15minutes. Get medical attention if irritation or ill effects develop or persist.

If Inhaled: Remove to fresh air Get medical attention if ill effects persist.

If Ingested: Get medical attention.

Other Note to physicians: Treat according to person's condition specifics of exposure. Treat symptomatically. For further information, the medical practitioner should contact Seunghyun Co., LTD.

SECTION 4 NOTES: NONE

SECTION 5: FIRE-FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media:

Suitable: On large fires use dry chemical or foam. On small fires use CO2 or dry chemical. Water can be used to cool fire exposed containers

Unsuitable: Water Do not allow extinguishing medium to contact container contents.

Specific Hazards Arising from the Chemical(e.g.nature of any Hazardous Combustion

Products): Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide.

Formaldehyde. Nitrogen oxides. Metal oxides

Special Protective Equipment and Precautions for Fire-Fighters: Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.

SECTION 5 NOTES: NONE

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment:

A void skin and eye contact.

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Do not breathe vapour.

Do not take internally.

Environmental Precautions:

Do not allow large quantities to enter drains or surface waters.

Methods for Cleaning up:

Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Wipe up or scrape up and contain for salvage or disposal Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Laws and regulations may apply releases and disposal of material, as well as those materials and items employed in the cleanup of releases. You will need to which laws and regulations are applicable.

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SECTION 6 NOTES: NONE

SECTION 7: HANDLING AND STORAGE

Handling Precautions:

Use with adequate ventilation. A void skin and eye contact. Do not breathe vapour. Do not take internally. Exercise good industrial hygiene practice. Wash after handing, especially before eating, drinking or smoking

Storage Conditions(including any incompatibilities):

Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

SECTION 7 NOTES: NONE

SECTION 8: PREVENTIVE MEASURES/PERSONAL PROTECTIVE EQUIPMENT

Occupational Exposure Limit Values, Biological Limit Values:

Ingredients	CAS No.	Exposure Limits
Diisononyl phthalate	68515-48-0	5 mg/m3 (TWA)
Titanium dioxide	96-29-7	15 mg/m3 (TWA)

Engineering Controls:

Local Ventilation: Recommended. General Ventilation: Recommended. Personal Protective Equipment:

- Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls..
- Suitable Respirator: Organic Vapor Type.
- Eye protection: Use chemical worker's goggles.
- Hand protection: Chemical protective gloves should be worn.
- Skin protection: Wash at mealtime and of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.
- Hygiene Measures: Remove contaminated clothing immediately. Exercise good industrial hygiene practice. Wash after handing, especially before eating, drinking or smoking.

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Spills

- Respiratory protection: Use self-contained breathing apparatus (SCBA) or other supplied-air respirator.
- Eye protection: Use full face respirator
- Skin protection: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected with cool water. Chemical protective gloves are recommended.

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- Precautionary Measures: A void skin and eye contact. Do not breathe vapour. Do not take internally. Use reasonable care.
- Comments: Product evolves methyl ethyl ketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control methyl ethyl ketoxime (MEKO) within exposure guidelines or use respiratory protection.

Note: These precautions are for room temperature handing. Use at elevated temperature or aerosol/spray applications may require added precautions.

SECTION 8 NOTES: NONE

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance(physical state, colour etc): paste, Colorless.

Odour: Some odor.

Odour Threshold: Not determined.

pH: Not determined.

Melting POINT/Freezing Point: Not determined.

Initial Boiling Point and Boiling Range: Not determined.

Flash Point: >100 °C(Seta Closed Cup)
Evaporation Rate: Not determined.
Flammability (solid, gas): Not determine

Flammability (solid, gas): Not determined.

Upper/ Lower Flammability or Explosive Limit: Not determined.

Vapor pressure @ 25°C: Not determined Solubility in Water: Not determined. Vapour Density (air=1): Not determined.

Specific Gravity: 1.56 ±0.03

Octanol/water partition: Not determined.
Autoignition Temperature: Not determined.
Decomposition Temperature: Not determined.

Viscosity: Not determined.

Molecular Weight: Not determined.

The above information is intended for use in preparing product specifications. Contact HUNUS INC

before writing specifications.

SECTION 9 NOTES: NONE

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability and possibility of Hazardous Reactions: Stable. Hazardous polymerization will

not occur.

Conditions: None.

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Materials to avoid: Can react with strong oxidising agents. Water, moisture or humid air can cause hazardous vapors to from.

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Hazardous Decomposition Products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide Formaldehyde. Nitrogen oxides. Metal oxides.

SECTION 10 NOTES: NONE

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the likely Routes of Exposure:

Respiratory: Exposure is unexpected.

Oral: Exposure is expected.
Eye, Skin: Exposure is expected.
Information on the Health Hazards:

Acute Toxicity:

LD50 Oral Rat	>10,000mg/kg
LD50 Dermal Rabbit	>3,160mg/kg
LC50 Inhale Rat	>16.6mg/kg

Eye: Direct contact may cause temporary redness and discomfort. Skin: May cause mild irritation. May produce an allergic reaction.

Inhalation: Irritates respiratory passages very slightly. Vapours evolved during curing may cause

dizziness.

Ingestion: Low ingestion hazard in normal use.

Chronic Toxicity:

Skin: Repeated or prolonged exposure may cause irritation.

Inhalation: Prolonged or repeated exposure by inhalation may injure internally. Ingestion: Repeated ingestion or swallowing large amounts may injure internally.

Other Health Hazard Information: No known applicable information.

Skin Corrosion/ Irritation: Please refer to Section 3.
Serious Eye Damage/ Irritation: Please refer to Section 3.

Respiratory Sensitization: Please refer to Section 3. Skin Sensitization: Please refer to Section 3.

Carcinogenicity: None known.

Germ Cell Mutagenicity: Please refer to Section 3. Reproductive Toxicity: Please refer to Section 3.

Specific Target Organ. Systemic Toxicity (Single Exposure): Please refer to Section 3. Specific Target Organ. Systemic Toxicity (Repeated Exposure): Please refer to Section 3.

Aspiration Hazard: Please refer to Section 3.

SECTION 11 NOTES: NONE

SECTION 12: ENVIRONMENTAL INFORMATION

Ecotoxicity:

Environmental Effects Acute: > 102mg/l - 96 h Chronic: > 74 mg/l - 48 h

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Persistence and Degradability:

Environmental Fate and Distribution: This product is a solid and does not contain significant concentrations of water soluble constituents that may be leached from the product. It is therefore not likely to present a danger to terrestrial organisms.

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Water: Solid material, insoluble in water.

Bioaccumulative Potential:

Bioaccumulation: No bioaccumulation potential.

Mobility in Soil: None known.

Additional Environmental Information:

Fate and Effects in Waste Water Treatment Plant: No adverse effects on bacteria are predicted.

SECTION 12 NOTES: NONE

SECTION 13: DISPOSAL CONSIDERATIONS

Product Disposal: Dispose of in accordance with local regulations. **Disposal precaution:** Dispose of in accordance with local regulations.

SECTION 13 NOTES: NONE

SECTION 14: TRANSPORT INFORMATION

Sea transport (IMDG):

UN No: Not subject to IMDG code. Class: Not subject to IMDG code.

Packing Group: Not subject to IMDG code.

Proper Shipping Name: Not subject to IMDG code.

Technical Name: Not subject to IMDG code.

Marine Pollutant(Yes/No): Not subject to IMDG code.

Hazard Label(s): Not subject to IMDG code.

Transportation Precautions:

Transport in accordance with the relevant regulations. Refer to section 7.2 for further information on transportation requirements. Refer to section 6 for the safety measures to be taken in the event of accidental release.

Other International Transportation Regulations

Air Transport (IATA-DGR):

UN No: Not subject to IATA code. Class: Not subject to IATA code.

Packing Group: Not subject to IATA code.

Proper Shipping Name: Not subject to IATA code.

Technical Name: Not subject to IATA code. Hazard Label(s): Not subject to IATA code.

SECTION 14 NOTES: NONE

SECTION 15: REGULATORY INFORMATION

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Classification and labeling in accordance with Industrial Safety and Health Law:

Harmful Substances Prohibited from Manufacturing: No subject chemicals

Harmful Substances Requiring Permission: No subject chemicals

Controlled Hazardous Substances: No subject chemicals

Chemicals controlled in accordance with Toxic Chemicals Control Act:

Toxic Chemicals: No subject chemicals

Observational Chemicals: No subject chemicals Prohibited Chemicals: No subject chemicals Restricted Toxic Chemicals: No subject chemicals Korean TRI Chemicals: No subject chemicals

Accident Release Prevention Chemicals: No subject chemicals

15.3 Hazardous Material Safety Management Act:

Classification: Not applicable for Korea Fire Law

15.4 Wastes Management Act: Product should be disposed of in accordance with Waste

Management Law Article 13.

Other Local or International Regulations:

Chemical Inventories:

AICS	All ingredients listed or exempt.
IECSC	All ingredients listed or exempt.
KECL	All ingredients listed, exempt or notified.
PICCS	All ingredients listed or exempt.
HSNO	All ingredients listed or exempt.
EINECS	Not determined.
TSCA	Not determined.
ENCS/ISHL	Not determined.
DSL	Not determined.

SECTION 15 NOTES: NONE

SECTION 16: OTHER INFORMATION

This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied, is here made. The recommended industrial hygiene and handing procedures are believed to be generally applicable. However, each should review these recommendations is the specific context of the intended use and determine whether they are appropriate.