SAFETY DATA SHEET (SDS)

NCgel Silicone System - Silicone-Based Electrical Insulation Gel
Prepared in a 16-section SDS format for technical communication and customer safety review

Item	Information
Product name	NCgel Silicone System
Product family	Protolin Electrical Insulation Systems
Product type	Two-component silicone-based electrical insulation gel
Use	Soft, removable electrical insulation, moisture protection and re-enterable potting
Mixing ratio	A:B = 1:1
Document type	Safety Data Sheet / Material Safety Data Sheet
Revision status	Customer communication draft - values are based on available supplier data and formulation guidance

This document is based on available product information, supplier technical data, supplier SDS information and formulation guidance. It does not replace an official CLP classification SDS prepared with full regulatory data. Final regulatory classification must be confirmed against the final formulation, raw material SDS documents and local legal requirements.

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

Field	Details
Product identifier	NCgel Silicone System
Relevant identified uses	Electrical insulation gel for junction boxes, cable joints, electronic enclosures, field-type sealing and remova
Uses advised against	Uses outside electrical insulation, sealing or potting applications unless separately validated.
Supplier	KETENCİ SAN. TİC. LTD. ŞTİ.
Address	Merkez Mah., Emirler Sok. No:21, Gaziosmanpaşa / İstanbul, Türkiye
Telephone	+90 532 676 22 82
E-mail	ketenci@protolin.net
Website	www.protolin.net
Emergency information	Use local emergency services and national poison information centers as applicable.

2. HAZARDS IDENTIFICATION

• Based on available supplier information, the product is not classified as hazardous under normal intended handling and use conditions.
• The mixture may cause temporary discomfort after direct skin or eye contact. Good industrial hygiene practices should be followed.
• Avoid unnecessary inhalation of vapors, mist or aerosols generated during processing.
• Spilled material may create a slipping hazard.
• Final regulatory classification should be verified using the final formulation and raw material SDS documents.

Classification area	Available assessment
CLP / GHS classification	Not classified as hazardous based on available supplier data.
Signal word	None required based on available data.
Hazard pictograms	None required based on available data.
Primary precautions	Avoid skin/eye contact. Use gloves and safety glasses. Do not discharge to drains or soil.

3. COMPOSITION / INFORMATION ON INGREDIENTS

• Chemical nature: silicone-based two-component electrical insulation gel system.
• The system contains silicone polymer / elastomeric components, filler and curing components supplied for mixing at the specified ratio.
• No hazardous components are expected above declaration thresholds based on available supplier information. This statement must be confirmed against the final formulation and supplier raw material SDS documents.

Component / description	CAS / EC	Typical information
Silicone polymer component	Mixture / polymeric material	Primary silicone base; dimethicone-type material may be present based on supplie
Silica / filler component	Mixture	White carbon black / silica-type filler may be present based on supplier SDS.
Curing / platinum-cure system	Mixture	Used at A:B = 1:1. Details to be verified with final formulation SDS.
Additives / formulation aids	Mixture	May be present at low levels depending on final production batch.

4. FIRST AID MEASURES

Exposure route	First aid recommendation
Inhalation	Move the person to fresh air. Keep at rest. If symptoms such as irritation, dizziness or breathing discomfort co
Skin contact	Remove contaminated clothing. Wash affected skin with soap and water. Do not use solvents for cleaning skin
Eye contact	Rinse cautiously with clean water for at least 15 minutes. Remove contact lenses if present and easy to do. Co
Ingestion	Rinse mouth. Do not induce vomiting unless instructed by medical personnel. Seek medical advice if a signific
Most important symptoms	Temporary eye or skin discomfort may occur after direct contact. No severe acute effects are known based on
Notes to physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Topic	Information
Suitable extinguishing media	Foam, dry chemical powder, carbon dioxide (CO2), water spray / fog.
Unsuitable extinguishing media	Do not use a strong water jet directly on burning material if it may spread the fire.
Specific hazards	High temperature decomposition may generate irritating fumes, silicon dioxide, carbon oxides and other deco
Protective equipment	Firefighters should wear self-contained breathing apparatus and full protective clothing.
Additional advice	Cool closed containers exposed to fire with water spray. Prevent contaminated firefighting water from enterin

6. ACCIDENTAL RELEASE MEASURES

• Wear suitable personal protective equipment: gloves, safety glasses and protective clothing.
• Avoid contact with skin and eyes. Avoid creating mist or aerosol.
• Prevent release into drains, surface water, soil and groundwater.
• Contain spill and absorb with inert material such as sand, earth, vermiculite or industrial absorbent.
• Collect in suitable labeled containers for disposal according to local regulations.
• Clean the contaminated surface thoroughly. Spills may be slippery.

7. HANDLING AND STORAGE

Area	Recommendation
Safe handling	Use in a clean, dry and well-ventilated working area. Avoid skin/eye contact. Do not eat, drink or smoke during
Mixing	Mix component A and component B accurately at A:B = 1:1. Avoid contamination of containers and tools.
Inhibition precautions	Avoid contamination with tin catalysts, sulfur, amines, phosphorus-containing compounds and incompatible a
Hygiene measures	Wash hands after handling. Remove contaminated clothing before reuse.
Storage temperature	Store between +5°C and +30°C.
Storage conditions	Keep containers tightly closed. Protect from moisture, direct sunlight and excessive heat.
Incompatible storage	Keep away from strong oxidizing agents and incompatible reactive chemicals.
Shelf-life note	Shelf-life depends on packaging configuration, storage conditions and final formulation. Use FIFO stock rotatio

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control / PPE	Recommendation
Occupational exposure limits	No specific exposure limits established for the mixture based on available information.
Engineering controls	Use general ventilation. Local exhaust ventilation may be useful if aerosols, vapors or heated processing co
Respiratory protection	Not normally required under good ventilation. Use suitable respiratory protection if ventilation is insufficient
Hand protection	Nitrile gloves or other chemically resistant gloves are recommended.
Eye protection	Safety glasses with side shields. Use goggles if splashing is possible.
Skin / body protection	Protective work clothing. Avoid prolonged or repeated skin contact.
Environmental exposure controls	Prevent uncontrolled release to drains, water and soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Typical value / information
Physical state	Liquid before cure; soft gel-like mass after curing
Appearance	Transparent to semi-transparent liquid before curing
Color	Transparent / translucent
Odor	Odorless to mild characteristic odor
Chemical base	Platinum-cure / addition-cure silicone system
Density	To be confirmed for final production batch
Viscosity / flow behavior	Medium viscosity silicone gel system suitable for pouch and nozzle dispensing
Mixing ratio	A:B = 1:1
Pot life	Approx. 30-40 minutes @ 25°C
Initial cure	Approx. 3-4 hours @ 25°C
Final cure	Approx. 24 hours @ 25°C depending on volume and geometry
Flash point	No data for final formulation; not expected to be readily flammable under normal conditions
Solubility in water	Not expected to be readily soluble
Explosive properties	Not expected
Oxidizing properties	Not expected

10. STABILITY AND REACTIVITY

Topic	Information
Reactivity	No dangerous reactivity expected under recommended handling and storage conditions.
Chemical stability	Stable under normal storage and use conditions.
Possibility of hazardous reactions	Not expected under recommended conditions. Cure behavior may change if components are mixed incorrec
Conditions to avoid	Excessive heat, open flame, incompatible contamination, direct sunlight and incompatible materials.
Incompatible materials	Strong oxidizing agents, tin catalysts, sulfur-containing compounds, amines and other cure-inhibiting conta
Hazardous decomposition products	Thermal decomposition or combustion may generate smoke, silicon dioxide, carbon oxides and irritating de

11. TOXICOLOGICAL INFORMATION

The following toxicological assessment is based on available supplier data / literature for silicone systems and related material information. It is not a substitute for a final regulatory toxicological classification of the exact formulation.

Endpoint	Available information / assessment
Acute toxicity	No classification based on available information.
Skin corrosion / irritation	Not expected to be corrosive. Prolonged or repeated contact may cause mild irritation.
Serious eye damage / irritation	Direct contact may cause temporary irritation or discomfort.
Respiratory / skin sensitization	No sensitization classification based on available information.
Germ cell mutagenicity	No classification based on available information.
Carcinogenicity	No classification based on available information.
Reproductive toxicity	No classification based on available information.
STOT - single exposure	No classification based on available information.
STOT - repeated exposure	No classification based on available information.
Aspiration hazard	No classification based on available information.

12. ECOLOGICAL INFORMATION

- Avoid uncontrolled release into the environment.
- Do not discharge into drains, surface waters or soil.
- The cured material is expected to have low mobility due to its gel-like / polymeric structure.
- No detailed aquatic toxicity dataset is available for the exact final formulation unless separately tested.

Topic	Available information
Ecotoxicity	Not classified based on available information.
Persistence and degradability	No formulation-specific data available.
Bioaccumulative potential	No formulation-specific data available.
Mobility in soil	Low mobility expected after curing.
PBT / vPvB assessment	No data indicating PBT/vPvB classification based on available information.
Other adverse effects	Avoid environmental release.

13. DISPOSAL CONSIDERATIONS

• Dispose of product waste, contaminated absorbents and empty containers according to local, regional and national regulations.
• Do not dispose of uncured material into drains or soil.
• Where possible, fully cure mixed residues before disposal, provided this is allowed by local regulation and safe handling practice.
• Empty containers may contain residues and should be handled accordingly.

Waste type	Recommendation
Uncured material	Collect in closed, labeled containers and dispose as industrial chemical waste according to local rules.
Cured material	Dispose according to local industrial waste regulations.
Contaminated packaging	Do not reuse unless professionally cleaned. Dispose or recycle according to local rules.

14. TRANSPORT INFORMATION

Transport regulation	Classification based on available supplier information
ADR / RID	Not regulated as dangerous goods
IMDG	Not regulated as dangerous goods
IATA / ICAO	Not regulated as dangerous goods
ADN	Not regulated as dangerous goods
UN number	Not applicable
Proper shipping name	Not applicable
Transport hazard class	Not applicable
Packing group	Not applicable
Environmental hazards	Not classified as marine pollutant based on available information
Special precautions	Keep containers closed and protected from damage, heat and contamination.
HS / GTIP reference	3910.00 - Silicones in primary forms; Turkish GTIP reference: 3910.00.00.00.19

15. REGULATORY INFORMATION

• This SDS is prepared in a 16-section format aligned with common SDS communication practice.
• Based on available supplier data, the product is not classified as hazardous.
• This document does not replace an official CLP classification SDS prepared with full regulatory data.
• Final CLP / GHS classification must be confirmed using the final formulation, raw material SDS documents and applicable national / regional regulations.
• Final REACH / RoHS status should be confirmed according to final formulation and raw material supplier declarations.
• The user is responsible for checking local legal obligations for storage, handling, workplace exposure, waste and transport.

Regulatory topic	Information
CLP / GHS classification	Not classified as hazardous based on available supplier data.
Transport information	Not regulated for transport of dangerous goods according to supplier SDS information.
Workplace safety	Use standard industrial hygiene and PPE measures.
SDS status	Customer communication SDS draft based on available information.

16. OTHER INFORMATION

This Safety Data Sheet is prepared for NCgel Silicone System technical and safety communication. The information is based on available product information, supplier technical data, supplier SDS information and formulation knowledge at the time of preparation. Values are typical and not batch-specific certificate values unless separately issued.

The product user must verify suitability and safety under actual use conditions, including application geometry, voltage, temperature, ventilation, workplace practice and environmental exposure. For batch-specific certificates, customer-specific approvals or official regulatory submission, additional testing and formal SDS review may be required.

Document control	Information
Product	NCgel Silicone System
Document	Safety Data Sheet (SDS)
Prepared for	Technical communication and customer safety review
Company	KETENCİ SAN. TİC. LTD. ŞTİ.
Address	Merkez Mah., Emirler Sok. No:21, Gaziosmanpaşa / İstanbul
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