

Rubber Compounds

1 Chemicals and Enterprise Identification

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| 1.1 Product description: | Rubber compounds |
| 1.2 Chemical classification: | Silicone compounds |
| 1.3 Product types: | NE-10, NE-20, NE-131, NE-141, NE-151, NE-161, NE-171, NE-181, NE-191, NE-130, NE-140, NE-150, NE-160, NE-170, NE-180, NE-190, NE-5140, NE-5150, NE-5160, NE-5170, NE-5180, NE-5240, NE-5250, NE-5260, NE-5270, NE-5280, NE-251, NE-261, NE-271, NE-281, NE-240, NE-250, NE-260, NE-270, NE-280, NE-7120, NE-7125, NE-7130, NE-7140, NE-7150, NE-7150U, NE-7155U, NE-7160, NE-7160U, NE-7170, NE-7180, NE-7190, NE-7240, NE-7250, NE-7260, NE-7270, NE-7280, NE-8131, NE-8135, NE-8141, NE-8151, NE-8161, NE-8171, NE-341, NE-345, NE-351, NE-3140, NE-3150, NE-3160, NE-3250, NE-3260, NE-3270, NE-631, NE-641, NE-651, NE-661, NE-671, NE-681, NE-GT131, NE-GT141, NE-GT151, NE-GT161, NE-GT171, NE-GT181, NE-1440, NE-1450, NE-1460, NE-1470, NE-J140, NE-J150, NE-J160, NE-J170 |
| 1.4 Company profile | |
| Manufacturer/supplier: | |
| Address: | |
| TEL: | |
| Emergency Phone Number: | |
| FAX: | |
| Contact: | |
| 1.5 1st manufacturing date | 5 th June 2013 |

2 Ingredients/Composition

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|-----------------------------------|-----------------------------------|
| 2.1 Chemical type: | Compound |
| 2.2 Physical form: | Solid |
| 2.3 Color: | Ivory |
| 2.4 Main use: | For manufacturing silicone rubber |
| 2.5 Hazardous ingredients: | |

| Chemicals | CAS NO | Concentration or Concentration Scope (% w/w) |
|------------------------------------|----------|--|
| Octamethylcyclotetrasiloxane (D4) | 556-67-2 | ≥0.1 - <1.0 |
| Decamethylcyclopentasiloxane (D5) | 541-02-6 | ≥0.1 - <1.0 |
| Dodecamethylcyclohexasiloxane (D6) | 540-97-6 | ≥0.1 - <1.0 |

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3 Hazard Identification

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| 3.1 Hazard type: | No hazard. |
| 3.2 Exposure pathway: | Exposure to skin and unexpected swallowing. |
| 3.3 Health hazards | |
| <u>Acute impacts</u> | |
| Eyes: | Direct contact might cause short reddening and discomfort. |
| Skin: | Short pure exposure doesn't have material impacts. |
| Inhale: | Short pure exposure doesn't have material impacts. |
| Intake: | Only very little intake harm is caused in case of normal use. |
| <u>Chronic impacts</u> | |
| Skin: | No proper materials. |
| Inhale: | No proper materials. |
| Intake: | Repeated intake or swallowing in large quantities might cause inner harms. |
| 3.4 Impacts and symptoms of excessive contact: | Single exposure doesn't cause any harm in case of normal use. |

The above potential hazards are listed based on data from research about ingredients of products or similar products or expert reviews of products. For detailed materials regarding toxicology, refer to Part 11.

4 First aid measures

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| 4.1 Eyes: | Flush with water right away. |
| 4.2 Skin: | First aid isn't needed. |
| 4.3 Inhale: | First aid isn't needed. |
| 4.4 Intake: | Go to see a doctor. |

5 Fire Protection Measures

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| 5.1 Combustion: | Non-combustible. |
| 5.2 Ignition temperature: | Unmeasured. |
| 5.3 Hazard characteristic: | None |
| 5.4 Extinguishing agents: | Use dry chemical articles, foam or water mist in case of big fire. Use carbon dioxide, dry chemical articles or water mist in case of small fire. The containers exposed to fire can be cooled down with water. |
| 5.5 Special extinguishing | Decide whether to evacuate or isolate them according to the |

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| procedures and equipment: | local emergency response plan. Cool down containers which are easily impacted by fire. To extinguish big fire related to chemical articles, self contained breathing apparatus and protective clothing shall be worn. |
| 5.6 Hazardous combustion products: | Carbon dioxide, minor incompletely burned carbides and silicon dioxide. |
| 5.7 Banned extinguishing agents: | Unidentified. |

6 Emergency Responses to Leakage

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| 6.1 Notes on personal protection: | Avoid eye contact. Oral administration is banned. |
| 6.2 Notes on environmental protection | It mustn't enter drainage systems or rivers in large quantities. |
| 6.3 Elimination method: | Follow all recommendations on the use of personal protective equipment listed in this material safety data sheet. Some related laws and rules might not only apply to the leakage and release of this material, but are also applicable to cleaning leaked materials. You shall clarify which laws and rules are more applicable. |

7 Operation and Storage

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| 7.1 Notes on personal protection: | Use adequate ventilation and exhaust equipment. Oral administration is banned. Take good industrial sanitary measures. Please clean the equipment after operation, especially before drinking or smoking. |
| 7.2 Notes on storage | Placed in well-ventilated and cool places. |
| 7.3 Unsuitable packaging materials: | Unidentified. |

8 Exposure Control/Personal Protection

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| 8.1 Industrial hygienic standards: | |
| <u>Composition</u> | <u>CAS No. Exposure Limit</u> |
| Unknown. | |
| 8.2 Engineering control | |
| Local ventilation equipment: | Banned. |
| Ordinary ventilation equipment | Recommended. |
| 8.3 Normally operated personal protective equipment | |

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| Protection of respiratory system: | Respiratory protective equipment isn't needed. |
| Eye protection: | Use of safety glasses for appropriate protection is the minimum requirement to be satisfied. |
| Hand protection: | Special protection isn't needed. |
| Skin protection: | Fully cleaned before dining and after work. |
| Personal hygienic measures: | Implement good industrial hygienic measures. Don't eat or smoke during operation; please ensure personal hygiene after operation. |

8.4 Personal protective equipment against leakage

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| Protection of respiratory system: | Respiratory protective equipment isn't needed. |
| Eye protection: | Use of safety glasses for appropriate protection is the minimum requirement to be satisfied. |
| Skin protection: | Fully cleaned before dining and after work. |
| Preventive measures: | Avoid eye contact. Oral administration is banned. Take proper preventive measures. |
| Notes: | When the material is heated to a temperature above 150°C, a very small amount of formaldehyde might be released, so adequate ventilation and exhaust equipment is needed. |

Remarks: All these operations are routine and performed at normal temperature. For operation at high temperature, other notes shall be followed.

9 Exposure Control/Personal Protection

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| 9.1 Physiochemical properties: | Solid |
| 9.2 Color: | Ivory. |
| 9.3 Smell: | No smell. |
| 9.4 pH: | Unmeasured. |
| 9.5 Melting point: | Unmeasured. |
| 9.6 Boiling point: | Unmeasured. |
| 9.7 Relative density (g/cm³) | Unmeasured. |
| 9.8 Relative vapor density (air density = 1): | Unmeasured. |
| 9.9 Octanol/water partition coefficient: | Unmeasured. |
| 9.10 Flash point: | None. |
| 9.11 Ignition temperature: | Unmeasured. |
| 9.12 Explosiveness: | Non-explosive. |
| 9.13 Solvability: | Unmeasured. |

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The above materials are only for reference.

10 Stability and Reactivity

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| 10.1 Stability: | Stable. |
| 10.2 Reactivity: | Ivory. |
| Conditions for avoiding exposure: | None. |
| Prohibited use of substances: | No proper materials. |
| Decomposition products: | Carbon dioxide, very small amount of incompletely burned carbides, silicon dioxide. |
| Polymerization: | No hazardous polymerization. |

11 Toxicological Materials

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| 11.1 Health hazards: | Refer to Point 3.3. |
| 11.2 Acute toxicity: | None. |
| 11.3 Irritancy: | No proper materials. |
| 11.4 Information on other health hazards: | No proper materials. |
| The above potential hazards are listed based on data from research about ingredients of products or similar products or expert reviews of products. | |

12 Ecological Materials

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| 12.1 Environmental impacts and their distribution: | Water insolvable. With unforeseeable adverse impacts. |
| 12.2 Environmental impacts: | Unforeseeable adverse impacts upon aquatic organisms. |
| 12.3 Bioaccumulation: | No proper materials. |
| 12.4 Non-biodegradable: | No proper materials. |

13 Disposal of Wastes

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| 13.1 Disposal method for product wastes: | Disposed of according to local rules. |
| 13.2 Disposal method for packaging wastes: | Disposed of according to local rules. |
| 13.3 Notes on wastes: | No proper materials. |

14 Transport Information

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| 14.1 Dangerous Goods Number: | Unknown. |
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| 14.2 UN Number: | Unknown. |
| 14.3 Package Mark: | No hazard symbol. |
| 14.4 Notes on transport | |
| Highway and railway transport: | None. |
| Sea freight (IMDG): | No IMDG. |
| Air freight (IATA): | Not within the scope of IATA. |

15 Information on Rules

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| 15.1 Applicable rules: | Rules on Safe Use of Chemicals in Workplaces [No.423 Document issued by the Ministry of Labor in 1966] specify provisions with respect to safe use, production, storage, transport, loading and unloading of hazardous chemicals. |
| 15.2 Chemical warehousing: | |
| KECL: | List, exempt or announce all compositions. |
| MITI: | Include all compositions in ENCS, or formulate other exemption rules. |
| IECSC: | List or exempt all compositions. |
| AICS: | List or exempt all compositions. |
| PICCS: | List or exempt all compositions. |
| EINECS: | Unmeasured. |
| TSCA: | Unmeasured. |
| DSL: | Unmeasured. |

16 Other Information

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| Contact: | |
| Prepared by: | |

This is not a product manual, but for defining representative concepts. It contains no guarantee, confession or implication. The recommended industrial hygienic and safety procedures are believed to be generally applicable. However, each user shall review the recommendations on predetermined application methods before using the product and confirm if the methods are applicable or not.