Safety Data Sheet According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 12/07/2021 Date of issue: 04/11/2013

Version: 4.0

NuSil

Avantor

SECTION 1: Identification of the Substance/mixture and of the Company/Undertaking

1.1. Product Identifier

Product form Product Name Synonyms Mixture MED-4502-2 Colour Masterbatch

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Relevant Identified Uses Use of the Substance/Mixture

For professional use only.

1.2.2. Uses Advised Against

No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology Europe 1198 Avenue Maurice Donat Le Natura Bt. 2 06250 Mougins France +33 4 92 96 93 31 ehs@nusil.com www.nusil.com

1.4. Emergency Telephone Number

Emergency Number

: 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime) +(44)-870-8200418 +(353)-19014670

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008 [CLP] Not classified

2.2. Label Elements

Labelling According to Regulation (EC) No. 1272/2008 [CLP] No labelling applicable

2.3. Other Hazards

Contains vPvB substances >= 0.1% assessed in accordance with REACH Annex XIIIOther Hazards Not Contributing
to the ClassificationExposure may aggravate pre-existing eye, skin, or respiratory
conditions.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

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3.2. Mixture

| Name | Product Identifier | % | Classification According to Regulation (EC) No. 1272/2008 [CLP] |
|-------------------------------|--|-----|--|
| Octamethylcyclotetrasiloxane | (CAS-No.) 556-67-2 (EC-No.) 209-136-7 (EC Index-No.) 014-018-00-1 | < 1 | Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Repr. 2, H361f Aquatic Chronic 4, H413 |
| Decamethylcyclopentasiloxane | (CAS-No.) 541-02-6 (EC-No.) 208-764-9 | < 1 | Not classified |
| Dodecamethylcyclohexasiloxane | (CAS-No.) 540-97-6 (EC-No.) 208-762-8 | < 1 | Not classified |

SECTION 4: First Aid Measures

4.1. Description of First-aid Measures

| First-Aid Measures General | Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). |
|-------------------------------|---|
| First-Aid Measures After | When symptoms occur: go into open air and ventilate |
| Inhalation | suspected area. Obtain medical attention if breathing difficulty persists. |
| First-Aid Measures After Skin | Remove contaminated clothing. Drench affected area with |
| Contact | water for at least 5 minutes. Obtain medical attention if irritation develops or persists. |
| First-Aid Measures After Eye | Rinse cautiously with water for at least 5 minutes. Remove |
| Contact | contact lenses, if present and easy to do. Continue rinsing. |
| | Obtain medical attention if irritation develops or persists. |
| First-Aid Measures After | Rinse mouth. Do NOT induce vomiting. Obtain medical |
| Ingestion | attention. |
| | and Effects Both Acute and Delayed |
| Symptoms/Effects | Not expected to present a significant hazard under anticipated conditions of normal use. |
| Symptoms/Effects After | Prolonged exposure may cause irritation. |
| Inhalation | |
| Symptoms/Effects After Skin | Prolonged exposure may cause skin irritation. |
| Contact | |
| Symptoms/Effects After Eye | May cause slight irritation to eyes. |
| Contact | |
| Symptoms/Effects After | Ingestion may cause adverse effects. |
| Ingestion | |
| Chronic Symptoms | None expected under normal conditions of use. |

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed If exposed or concerned, get medical advice and attention. If medical advice is needed, have

product container or label at hand.

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SECTION 5: Firefighting Measures

5.1. Extinauishina Media

| Water spray, fog, carbon dioxide (CO2), alcohol-resistant foam, |
|---|
| or dry chemical. |
| Do not use a heavy water stream. Use of heavy stream of water |
| may spread fire. |
| rom the Substance or Mixture |
| Not considered flammable but may burn at high temperatures. |
| Product is not explosive. |
| Hazardous reactions will not occur under normal conditions. |
| |
| Exercise caution when fighting any chemical fire. |
| Use water spray or fog for cooling exposed containers. |
| Do not enter fire area without proper protective equipment, including respiratory protection. |
| |

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

| General Measures | Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapour, mist, spray). |
|----------------------------------|--|
| 6.1.1. For Non-Emergency Personr | nel |
| Protective Equipment | Use appropriate personal protective equipment (PPE). |
| Emergency Procedures | Evacuate unnecessary personnel. |
| 6.1.2. For Emergency Responders | |
| Protective Equipment | Equip cleanup crew with proper protection. |
| Emergency Procedures | Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. |
| 6.2. Environmental Precaution | S |

Prevent entry to sewers and public waters.

Methods and Materials for Containment and Cleaning Up 6.3.

| For Containment | Contain any spills with dikes or absorbents to prevent migration |
|-------------------------|--|
| | and entry into sewers or streams. |
| Methods For Cleaning Up | Clean up spills immediately and dispose of waste safely. |
| | Transfer spilled material to a suitable container for disposal. |
| | Contact competent authorities after a spill. |

6.4. **Reference to Other Sections**

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: Handling And Storage

Precautions for Safe Handling 7.1.

Precautions for Safe Handling Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapours, mist, spray. EN (English)

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| Hygiene Measures | Handle in accordance with good industrial hygiene and safety |
|------------------------------|--|
| | procedures. |
| 7.2. Conditions for Safe Sta | orage, Including Any Incompatibilities |
| Technical Measures | Comply with applicable regulations. |
| Storage Conditions | Keep container closed when not in use. Store in a dry, cool |
| | place. Keep/Store away from direct sunlight, extremely high or |

Incompatible Materials

low temperatures and incompatible materials. Strong acids, strong bases, strong oxidizers.

Specific End Use(S) 7.3.

For extrusion, transfer and compression molding and calendaring. For professional use only.

SECTION 8: Exposure Controls/Personal Protection

Control Parameters 8.1.

No additional information available

8.2. **Exposure Controls**

| Appropriate Engineering | Suitable eye/body wash equipment should be available in the |
|-----------------------------|--|
| Controls | vicinity of any potential exposure. Ensure adequate ventilation, |
| | especially in confined areas. Ensure all national/local |
| | regulations are observed. |
| Remand Protective Equipment | Claves Protective electrica Protective geograps |

Personal Protective Equipment

Gloves. Protective clothing. Protective goggles.



| Materials for Protective Clothing | Chemically resistant materials and fabrics. |
|-----------------------------------|---|
| Hand Protection | Wear protective gloves. |
| Eye Protection | Chemical safety goggles. |
| Skin and Body Protection | Wear suitable protective clothing. |
| Respiratory Protection | If exposure limits are exceeded or irritation is experienced, |
| | approved respiratory protection should be worn. In case of |
| | inadequate ventilation, oxygen deficient atmosphere, or where |
| | exposure levels are not known wear approved respiratory |
| | protection. |
| Other Information | When using, do not eat, drink or smoke. |

SECTION 9: Physical and Chemical Hazards

9.1. Information on Basic Physical and Chemical Properties

| Physical State | Liquid |
|---------------------------|-------------------|
| Colour | Black |
| Odour | Odourless |
| Odour Threshold | No data available |
| рН | No data available |
| Evaporation Rate | No data available |
| Melting Point | No data available |
| Freezing Point | No data available |
| Boiling Point | No data available |
| Flash Point | >135 °C (275 °F) |
| Auto-Ignition Temperature | No data available |

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| Decomposition Temperature | | No data available |
|-----------------------------------|------|-------------------|
| Flammability (Solid, Gas) | | Not applicable |
| Vapour Pressure | | No data available |
| Relative Vapour Density At 20 °C | | No data available |
| Relative Density | | > 1 (Water=1) |
| Solubility | | No data available |
| Partition Coefficient n-Octanol/W | ater | No data available |
| Viscosity, Kinematic | | No data available |
| Viscosity, Dynamic | | No data available |
| Explosive Properties | | No data available |
| Oxidising Properties | | No data available |
| Explosive Limits | | No data available |
| 9.2. Other Information | | |
| VOC content | <1% | |

SECTION 10: Stability and Reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility Of Hazardous Reactions

Hazardous polymerization will not occur.

10.4. Conditions To Avoid

Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products

Carbon oxides (CO, CO₂). Silicon oxides. Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapours. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

| Acute Toxicity | Not classified (Based on available data, the classification criteria are not met) |
|------------------------------|---|
| Octamethylcyclotetrasiloxane | (556-67-2) |
| LD50 oral rat | 1540 mg/kg |
| LD50 dermal rabbit | 794 µl/kg |
| LC50 inhalation rat (mg/l) | 36 g/m³ (Exposure time: 4 h) |
| Decamethylcyclopentasiloxar | ne (541-02-6) |
| LD50 Oral Rat | > 5000 mg/kg (Species: Sprague-Dawley) |
| LD50 Dermal Rabbit | > 2000 mg/kg (Species: New Zealand White) No deaths reported |
| LC50 Inhalation Rat | 8,67 mg/l/4h (Species: Fischer) |
| Dodecamethylcyclohexasiloxo | ane (540-97-6) |
| LD50 Oral Rat | > 50 g/kg |
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| Skin Corrosion/Irritation | Not classified (Based on available data, the classification criteria are not met) |
|---|--|
| Eye Damage/Irritation | Not classified (Based on available data, the classification criteria are not met) |
| Respiratory or Skin Sensitization | Not classified (Based on available data, the classification criteria are not met) |
| Germ Cell Mutagenicity | Not classified (Based on available data, the classification criteria are not met) |
| Carcinogenicity | Not classified (Based on available data, the classification criteria are not met) |
| Reproductive Toxicity | Not classified (Based on available data, the classification criteria are not met) |
| Specific Target Organ Toxicity (Single Exposure) | Not classified (Based on available data, the classification criteria are not met) |
| Specific Target Organ Toxicity (Rep Exposure) | Deated Not classified (Based on available data, the classification criteria are not met) |
| Aspiration Hazard | Not classified (Based on available data, the classification criteria are not met) |

SECTION 12: Ecological Information

12.1. Toxicity

| Ecology - General | | Not classified. | | |
|--|----------|--|--|--|
| Octamethylcyclotetrasilo | xane (5 | 56-67-2) | | |
| LC50 fish 1 | > 5 | > 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio) | | |
| LC50 fish 2 | > 1 | > 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus) | | |
| 12.2. Persistence and De | grada | bility | | |
| MED-4502-2 | | | | |
| Persistence and Degradability | | Not established. | | |
| 12.3. Bioaccumulative P | otentia | 1 | | |
| MED-4502-2 | | | | |
| Bioaccumulative potential | | Not established. | | |
| 12.4. Mobility in Soil | | | | |
| No additional information o | availabl | e | | |
| 12.5. Results of PBT and | vPvB as | sessment | | |
| Octamethylcyclotetrasilo | xane (5 | 56-67-2) | | |
| This substance/mixture meets the vPvB criteria of REACH regulation, annex XIII | | | | |
| Decamethylcyclopentasil | oxane (| (541-02-6) | | |
| This substance/mixture me | eets the | vPvB criteria of REACH regulation, annex XIII | | |
| Dodecamethylcyclohexa | siloxane | e (540-97-6) | | |
| This substance/mixture me | eets the | vPvB criteria of REACH regulation, annex XIII | | |
| | | | | |

12.6. Other Adverse Effects

Other Information

Avoid release to the environment.

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SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Product/Packaging Disposal Recommendations Ecology - Waste Materials Dispose of contents/container in accordance with local, regional, national, and international regulations. Avoid release to the environment.

SECTION 14: Transport Information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued. In accordance with ADR / RID / IMDG / IATA / ADN

 14.1. UN Number

 Not regulated for transport

 14.2. UN Proper Shipping Name

 Not regulated for transport

 14.3. Transport Hazard Class(Es)

 Not regulated for transport

 14.4. Packing Group

 Not regulated for transport

 14.5. Environmental Hazards

 Not regulated for transport

14.6. Special Precautions For User

No additional information available

14.7. Transport in Bulk According to Annex II of MARPOL and The IBC Code Not applicable

SECTION 15: Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit:

Octamethylcyclotetrasiloxane (D4) (EC 209-136-7, CAS 556-67-2)

Decamethylcyclopentasiloxane (D5) (EC 208-764-9, CAS 541-02-6),

Dodecamethylcyclohexasiloxane (D6) (EC 208-762-8, CAS 540-97-6)

Contains no REACH Annex XIV substances

15.1.2. National Regulations

No additional information available

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out

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SECTION 16: Other Information

Indication of Changes

| Section | Section Header | Change | Date Changed |
|---------|--|----------|--------------|
| 1 | Identification of the Substance/mixture and of the | Modified | 12/07/2021 |
| | Company/Undertaking | | |
| 2 | Hazards identification | Modified | 12/07/2021 |
| 3 | Composition/information on ingredients | Modified | 12/07/2021 |
| 11 | Toxicological information | Modified | 12/07/2021 |
| 12 | Ecological Information | Modified | 12/07/2021 |
| 15 | Regulatory information | Modified | 12/07/2021 |

Date of Preparation or Latest 12/07/2021 Revision Data Sources

Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites,

product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent

adoption of GHS.

Other Information

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Abbreviations and Acronyms

| Abbie fidilolis dila Actorynis | |
|--|--|
| ACGIH – American Conference of Governmental Industrial Hygienists | MARPOL - International Convention for the Prevention of Pollution |
| ADN – European Agreement Concerning the International Carriage of Dangerous | NDS - Najwyzsze Dopuszczalne Stezenie |
| Goods by Inland Waterways | NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe |
| ADR - European Agreement Concerning the International Carriage of Dangerous | NDSP - Najwyzsze Dopuszczalne Stezenie Pulapowe |
| Goods by Road | NOAEL - No-Observed Adverse Effect Level |
| ATE - Acute Toxicity Estimate | NOEC - No-Observed Effect Concentration |
| BCF - Bioconcentration Factor | NRD - Nevirsytinas Ribinis Dydis |
| BEI - Biological Exposure Indices (BEI) | NTP – National Toxicology Program |
| BOD – Biochemical Oxygen Demand | OEL - Occupational Exposure Limits |
| CAS No Chemical Abstracts Service Number | PBT - Persistent, Bioaccumulative and Toxic |
| CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008 | PEL - Permissible Exposure Limit |
| COD – Chemical Oxygen Demand | pH – Potential Hydrogen |
| EC – European Community | REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals |
| EC50 - Median Effective Concentration | RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail |
| EEC – European Economic Community | SADT - Self Accelerating Decomposition Temperature |
| EINECS – European Inventory of Existing Commercial Chemical Substances | SDS - Safety Data Sheet |
| EmS-No. (Fire) - IMDG Emergency Schedule Fire | STEL - Short Term Exposure Limit |
| EmS-No. (Spillage) - IMDG Emergency Schedule Spillage | TA-Luft - Technische Anleitung zur Reinhaltung der Luft |
| EU – European Union | TEL TRK – Technical Guidance Concentrations |
| ErC50 - EC50 in Terms of Reduction Growth Rate | ThOD – Theoretical Oxygen Demand |
| GHS – Globally Harmonized System of Classification and Labeling of Chemicals | TLM - Median Tolerance Limit |
| IARC - International Agency for Research on Cancer | TLV - Threshold Limit Value |
| IATA - International Air Transport Association | TPRD - Trumpalaikio Poveikio Ribinis Dydis |
| IBC Code - International Bulk Chemical Code | TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in |
| IMDG - International Maritime Dangerous Goods | ortsbeweglichen Behältern |
| IPRV - Ilgalaikio Poveikio Ribinis Dydis | TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine |
| IOELV – Indicative Occupational Exposure Limit Value | TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte |
| LC50 - Median Lethal Concentration | TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte |
| LD50 - Median Lethal Dose | TSCA - Toxic Substances Control Act |
| LOAEL - Lowest Observed Adverse Effect Level | TWA - Time Weighted Average |
| LOEC - Lowest-Observed-Effect Concentration | VOC – Volatile Organic Compounds |
| Log Koc - Soil Organic Carbon-water Partitioning Coefficient | VLA-EC - Valor Límite Ambiental Exposición de Corta Duración |
| Log Kow - Octanol/water Partition Coefficient | VLA-ED - Valor Límite Ambiental Exposición Diaria |
| Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a | VLE – Valeur Limite D'exposition |
| two-phase system consisting of two largely immiscible solvents, in this case octanol | VME – Valeur Limite De Moyenne Exposition |
| and water | vPvB - Very Persistent and Very Bioaccumulative |
| MAK – Maximum Workplace Concentration/Maximum Permissible Concentration | WEL – Workplace Exposure Limit |
| | WGK - Wassergefährdungsklasse |
| | |

Nusil FU GHS SDS

The information provided in this Safety Data Sheet (SDS) was prepared based on data believed to be accurate as of the date of this SDS. TO THE GREATEST EXTENT PERMITTED BY LAW, NUSIL TECHNOLOGY LLC AND ITS AFFILIATED COMPANIES ("NUSIL") EXPRESSLYDISCLAIMS ANY AND ALL

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