



Revision date: Initial version

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Trade name: Nano Mold Coating QCR

SECTION 1: Identification

Product identifier used on the label:

Product Name: Nano Mold Coating QCR

Other means of identification:

Product Code Number: NMC-QCR

Recommended use of the chemical and restrictions on use:

Recommended use: Plastic injection mold coating.

Recommended restrictions: Uses other than as recommended above.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Company Name: Nanoplas, Inc.
Company Address: 2950 Prairie St., SW,
Suite 900, Grandville, MI 49418
Company Telephone: 616-452-3707
08:30 -17:00 Eastern Standard Time (EST)
Company Contact Name: John Hoff
Company Contact Email: john@nanomoldcoating.com
Emergency phone number: 616-452-3707 (24 hours)

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Skin irritation, Category 2.
Eye irritation, Category 2A.

GHS Signal word: WARNING

GHS Hazard statement(s): Causes skin irritation.
Causes serious eye irritation.

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Wash skin thoroughly after handling.
Wear protective gloves/ eye protection/ face protection.
If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Specific treatment (see section 4 to 8 on this SDS and any additional information (where available) on this label).
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

Hazard(s) not otherwise Classified (HNOC):

None known.

Percentage of ingredient(s) of unknown acute toxicity:

8% of the mixture consists of ingredients of unknown acute toxicity (oral/dermal/inhalation).

SECTION 3: Composition/information on ingredients

Mixture: Hazardous mixture.

| Chemical name | CAS# | Concentration (weight %) |
|----------------------|-------------|---------------------------------|
| Proprietary Resins | Proprietary | 1 - 8% |

Note: The balance of the ingredients are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret due to the proprietary nature of some of the components.

SECTION 4: First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

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Inhalation: Move to fresh air. Give oxygen or artificial respiration if needed. Consult a physician.

Skin contact: If on skin, rinse well with water. Wash contaminated clothing before re-use. Consult a physician if necessary.

Eye contact: Immediately flush eye(s) with plenty of water. If eye irritation persists, consult a specialist.

Ingestion: DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Call a physician.

Most important symptoms/effects, acute and delayed: May cause skin irritation. May cause eye irritation.

Indication of immediate medical attention and special treatment needed: If any symptoms are observed, contact a physician and give them this SDS sheet.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media: Not flammable. Use extinguishing media suitable for type of surrounding fire.

Unsuitable extinguishing media: No information available.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Hazardous thermal decomposition products: Silicon dioxide, Carbon oxides, nitrogen oxides (NO_x), metal oxides, Sulfur compounds, Methanol, Formaldehyde.

Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus and protective clothing. Fight fire from a protected location. Wear self-contained breathing apparatus and protective clothing. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with cleanup.

Ventilate spill area. Wear appropriate protective equipment, such as gloves, goggles and protective clothing, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Methods and materials for containment and cleaning up:

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Prevent material from entering sewers, waterways, or low areas.
Dike spill. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Transfer to suitable properly labeled containers for recycling and/or disposal.

SECTION 7: Handling and storage

Precautions for safe handling: Do not breathe vapors or spray mist. Avoid circumstances that produce respirable particles unless suitable ventilation and respirator are used. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling. Remove and wash contaminated clothing before re-use. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Conditions for safe storage, including any incompatibles: Keep containers tightly closed in a dry, cool and well-ventilated place. Store only in approved containers. Do not freeze. Perishable if frozen. See section 10 for incompatible materials.

SECTION 8: Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

| US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200) (Table Z-1 Limits for Air Contaminants): | | |
|---|-----------------------------|------------------------------|
| Substance | PEL-TWA (8 hour) | PEL-STEL (15 min) |
| Proprietary Resins | No data available | No data available |

| US ACGIH Threshold Limit Values | | |
|--|-----------------------------|------------------------------|
| Substance | TLV-TWA (8 hour) | TLV-STEL (15 min) |
| Proprietary Resins | No data available | No data available |

Appropriate engineering controls: Use material in well-ventilated area only. Do not aerosolize. Good general ventilation (typically 10 air changes per hour) should be sufficient in most cases. Ventilation rates should be matched to conditions. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Use appropriate personal protective equipment and clothing to avoid skin contact.

Individual protection measures, such as personal protective equipment:

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Eye/face protection: When handling solutions of the material use safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin and hand protection: Use good industrial hygiene practices to avoid skin contact. Use protective clothing impervious to this material. Handle with impervious gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection: Provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. In the case of dust or aerosol formation use respirator with an approved filter. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

General hygiene considerations: Where there is potential for skin contact, have available and wear as appropriate, impervious gloves, apron, pants, jacket, hood and boots. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.):

| | |
|---|-----------------|
| Physical state: | Liquid |
| Color: | White |
| Odor: | Slight sweet |
| Odor threshold: | Not available |
| pH: | Neutral |
| Melting point/freezing point: | 0 °C (32 °F) |
| Initial boiling point and boiling range: | 100 °C (212 °F) |
| Flash point: | None |
| Evaporation rate: | Not applicable |
| Flammability (solid, gas): | Not applicable |
| Upper/lower flammability or explosive limits | |
| Flammability limit – lower (%): | Not applicable |
| Flammability limit – upper (%): | Not applicable |
| Explosive limit – lower (%): | Not applicable |
| Explosive limit – upper (%): | Not applicable |
| Vapor pressure: | Not determined |
| Vapor density: | < 1 |

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| | |
|---|--|
| Relative density: | 0.99 |
| Solubility (ies): | Soluble in water, insoluble in other solvents. |
| Partition coefficient (n-octanol/water): | Not determined |
| Auto-ignition temperature: | Not determined |
| Decomposition temperature: | 300 °C (572 °F) |
| Viscosity (dynamic): | No data available |

SECTION 10: Stability and reactivity

| | |
|--|---|
| Reactivity: | Material is not expected to be reactive. |
| Chemical stability: | Stable under recommended storage conditions. |
| Possibility of hazardous reactions: | Hazardous polymerization will not occur. |
| Conditions to avoid: | Decomposition temperature 300 °C (572 °F). Decomposes on heating. |
| Incompatible materials: | Avoid contact with oxidizing agents. |
| Hazardous decomposition Products: | Silicon dioxide, Carbon oxides, nitrogen oxides (NO _x), metal oxides, Sulfur compounds, Methanol, Formaldehyde. |

SECTION 11: Toxicological information

Information on likely routes of exposure:

| | |
|--------------------|----------------------------------|
| Inhalation: | May be a route of entry. |
| Ingestion: | May be a route of entry. |
| Skin: | Expected to be a route of entry. |
| Eyes: | Expected to be a route of entry. |

Symptoms related to the physical, chemical, and toxicological characteristics:

May cause skin irritation. May cause eye irritation. May causes respiratory tract irritation, and shortness of breath.

The thermal decomposition vapors of fluorinated polymers may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. Shortness of breath.

Delayed and immediate effects and chronic effects from short or long-term exposure:

Chronic exposure may result in an increase in the severity of the symptoms described above.

Numerical measures of toxicity (such as acute toxicity estimates):

| Substance | Test Type (species) | Value |
|-----------|---------------------|-------|
|-----------|---------------------|-------|

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| | | |
|---------------------------------------|-----------------------------------|-------------------|
| PRODUCT - Nano Mold Coating QCR | LD ₅₀ Oral (Rat) | > 11000 mg/kg |
| | LD ₅₀ Dermal (Rabbit) | No data available |
| | LC ₅₀ Inhalation (Rat) | > 0.50 mg/l - 4h |

Ingredient Information:

| Substance | Test Type (species) | Value |
|--------------------|-------------------------------------|-------------------|
| Proprietary Resins | LD ₅₀ Oral (Rat) | No data available |
| | LD ₅₀ Dermal (Rabbit) | No data available |
| | LC ₅₀ Inhalation (Mouse) | No data available |

- Skin corrosion/irritation:** Based on data from components this product may cause skin irritation.
- Serious eye damage/eye irritation:** Based on data from components this product may cause eye irritation.
- Respiratory sensitization:** Not expected to cause respiratory sensitization.
- Skin sensitization:** Not expected to cause skin sensitization.
- Germ cell mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
- Carcinogenicity:** No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.
- Reproductive toxicity:** No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).
- Specific target organ toxicity-
Single exposure:** No information available on the mixture, however none of the components have been classified for STOT SE (or are below the concentration threshold for classification).

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**Specific target organ toxicity-
Repeat exposure:**

No information available on the mixture, however none of the components have been classified for STOT RE (or are below the concentration threshold for classification).

Aspiration hazard:

No information available on the mixture, however none of the components have been classified for aspiration hazards (or are below the concentration threshold for classification).

SECTION 12: Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

Product data:

| Substance | Test Type | Species | Value |
|---------------------------------|------------------|--|--------------------|
| PRODUCT - Nano Mold Coating QCR | LC ₅₀ | Fish - Oncorhynchus mykiss (rainbow trout) | 180 mg/l - 96h |
| | EC ₅₀ | Daphnia magna (Water flea) | > 1000 mg/l - 48 h |
| | EC ₅₀ | Algae - Pseudoriella subcapitata (green algae) | > 1000 mg/l - 72h |

Ingredient Information:

| Substance | Test Type | Species | Value |
|------------------------|---------------------|---------|-------------------|
| Proprietary Surfactant | LC ₅₀ | Fish | No data available |
| | EC ₅₀ | Daphnia | No data available |
| | EC/LC ₅₀ | Algae | No data available |

Persistence and Degradability: Not established.

Bioaccumulative Potential: Not established.

Mobility in Soil: Not established.

Other adverse effects (such as hazardous to the ozone layer): Avoid release to the environment.

SECTION 13: Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

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All disposal methods must be in compliance with all federal, state/provincial and local laws and regulations. Waste characteristics and compliance with applicable laws are the responsibility solely of the waste generator.

For unused and uncontaminated product, the preferred options include sending to a licensed, permitted, reclaimer, landfill or wastewater treatment system.

Contaminated packaging: Contaminated packaging may contain traces of the product and therefore should be disposed of in the same way as product.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR)

Not regulated for transport by DOT.

IMDG (Transport by sea)

Not regulated for transport by IMDG.

IATA (Country variations may apply)

Not regulated for transport by IATA.

Environmental hazards

Marine pollutant: No.

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

No further relevant information available.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

No data available

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All of the ingredients are listed on the U.S. EPA TSCA Inventory List.

CERCLA Hazardous Substance List, 40 CFR 302.4: None listed.

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed

SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370):

| | |
|-----------------------------------|-----|
| Acute Health Hazard | YES |
| Chronic Health Hazard | NO |
| Fire Hazard | NO |
| Reactivity Hazard | NO |
| Sudden Release of Pressure Hazard | NO |

Section 313 Toxic Chemicals (40 CFR 372.65): None listed

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986): No components are listed on Prop 65.

Massachusetts Right to Know: None of the components are listed on the Massachusetts Right to Know List.

New Jersey Right to Know: Propylene Glycol is listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: Propylene Glycol is listed on the Pennsylvania Right to Know List.

SECTION 16: Other Information

Revision Date: Feb 08, 2016

DISCLAIMER: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 1910.1200. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.