



SAFETY DATA SHEET

SDS Version: 1

Revision Date: 05/28/19

Zhejiang Fenghong New Material Co. Ltd.

HFGEL 120-C

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HFGEL 120-C

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE: Rheology Modifier

Restrictions on use of this material has not been determined.

SUPPLIER

Palmer Holland
25000 Country Club Boulevard
North Olmstead, Ohio 44070
Phone: 800-635-4822

For product inquiries:
info@palmerholland.com

Chemical emergency ONLY (spill, leak, fire, exposure or accident)

EMERGENCY TELEPHONE NUMBER(S)

| | |
|------------------------------------|-----------------|
| CHEMTREC, 24-hour - USA: | 800-424-9300 |
| CHEMTREC, 24-hour - International: | +1 703-527-3887 |

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Carcinogenicity, Category 1A
Acute Toxicity, Category 1 (lungs)

GHS LABEL



Health Hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

May form combustible dust concentrations in air.
H350 May cause cancer by inhalation.
H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

PRECAUTIONARY STATEMENT(S)

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P281 Use personal protective equipment as required.

Response:

P308 + P313 If exposed or concerned: Get medical advice/attention.



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Storage:

P405 Store locked up.

Disposal:

P501: Dispose of contents/container to an approved waste disposal plant.

Other Hazards:

None known

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Substance

Chemical Name: Organoclay

| Chemical Name | Wt. % | CAS |
|-----------------------------|-------|------------|
| Crystalline silica (quartz) | < 3 | 14808-60-7 |

4. FIRST AID MEASURES

GENERAL ADVICE: Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.

INHALATION: IF INHALED: Remove person to fresh air. Keep person quiet and warm and at rest in a position comfortable for breathing. Apply artificial respiration if breathing is difficult, and get medical attention immediately.

SKIN: Remove contaminated clothing. Flush skin thoroughly with soap and plenty of water. If person feels unwell or symptoms of skin irritation persist, get medical attention immediately.

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lenses if possible.

INGESTION: If swallowed, CALL A PHYSICIAN immediately and show this SDS or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious victim.

Most important symptoms and effects, both acute and delayed:

No information available.

5. ADVICE FOR FIREFIGHTERS

SUITABLE EXTINGUISHING MEDIA: Use alcohol-resistant foam, dry chemical, carbon dioxide (CO₂).

UNSUITABLE EXTINGUISHING MEDIA: No information available.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE: Handle as an industrial chemical. Keep dust to a minimum to avoid potential formation of explosive air/dust mixture. Will not explode on mechanical impact. Do not allow run-off from firefighting to enter drains or water courses.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: As in a fire, always wear self-contained breathing apparatus in pressure-demand (MSA/NIOSH approved or equivalent), and full protective gear.



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FURTHER INFORMATION: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

For non-emergency personnel:

Wear all appropriate Personal Protective Equipment (see Section 8), including respiratory protection. Keep people away from and upwind of spill/leak. See section 12 for more information.

For emergency responders:

Use personal protection recommended in Section 8 of SDS. See also information in "For non-emergency personnel." Remove all ignition sources. Keep nonessential personnel away from the contaminated area.

ENVIRONMENTAL PRECAUTIONS: Avoid run-off into storm sewers and ditches that lead to waterways. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains, inform respective authorities.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Take precautionary measures against static discharges.

Do not create a powder cloud by using a brush or compressed air. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Wear all appropriate Personal Protective Equipment (PPE) (see Section 8). Avoid formation of respirable particles. Do not breathe vapors/dust. Avoid exposure – obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Provide for appropriate exhaust ventilation and dust collection at machinery. Minimize dust generation and accumulation. Routing housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep product and empty container away from heat and sources of ignition.

ADDITIONAL STORAGE:

Not required under normal use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|-----------------------------|------------|----------------------------------|--|----------|
| Crystalline silica (quartz) | 14808-60-7 | TWA (total dust) | 30 mg/m ³ /%SiO ₂ +2 | OSHA Z-3 |
| Crystalline silica (quartz) | | TWA (respirable) | 10 mg/m ³ /%SiO ₂ +2 | OSHA Z-3 |
| Crystalline silica (quartz) | | TWA (respirable) | 250 mppcf /%SiO ₂ +5 | OSHA Z-3 |
| Crystalline silica (quartz) | | TWA (respirable dust fraction) | 0.1 mg/m ³ | OSHA P0 |



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| | | | | |
|-----------------------------|--|---------------------------|----------------------------------|-----------|
| Crystalline silica (quartz) | | TWA (respirable fraction) | 0.025 mg/m ³ (Silica) | ACGIH |
| Crystalline silica (quartz) | | TWA (respirable dust) | 0.05 mg/m ³ (Silica) | NIOSH REL |

OSHA has established an action limit of 0.025 mg/m³ (8-hr TWA) and a permissible exposure limit of .05 mg/m³ (8-hour TWA) for respirable crystalline silica.

Further occupational exposure limits:

| Description | Value type | Control parameters | Basis |
|--------------------------------------|------------|---|----------|
| inert or nuisance dust | TWA | 50 Million particles per cubic foot total dust | OSHA Z-3 |
| | TWA | 15mg/m ³ Total dust | OSHA Z-3 |
| | TWA | 15mg/m ³ Total dust | OSHA Z-3 |
| | TWA | 15mg/m ³ Total dust | OSHA Z-3 |
| Dust, nuisance dust and particulates | PEL | 10 mg/m ³ Total dust | CAL PEL |
| | PEL | 5 mg/m ³ respirable dust fraction | CAL PEL |

APPROPRIATE ENGINEERING CONTROLS: Maintain adequate engineering controls and/or ventilation to keep hazardous ingredients below their statutory limits. Use an approved respirator whenever exposure limits are exceeded.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT (PPE)

RESPIRATORY: Unless air monitoring demonstrates vapor/mist/dust levels are below the PEL/TLV wear a properly fitted respirator (NIOSH/OSHA approved) or effective dust mask during exposure.

HAND PROTECTION: Neoprene gloves; protective gloves; impervious butyl rubber gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

EYES AND FACE: Chemical safety goggles.

SKIN AND BODY PROTECTION: Dust impervious protective suit. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work place.

HYGIENE MEASURES: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Powder

COLOR: light white

ODOR: Odorless

ODOR THRESHOLD: No data available.

pH: No data available.



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MELTING POINT/RANGE: No data available.

BOILING POINT/RANGE (°C): No data available.

FLASH POINT: No data available.

EVAPORATION RATE: No data available.

FLAMMABILITY (SOLID, GAS): May form combustible dust concentrations in air

IGNITION TEMPERATURE: No data available.

UPPER/LOWER FLAMMABILITY/EXPLOSIVE LIMITS: No data available

VAPOR PRESSURE (25 °C): No data available

VAPOR DENSITY: No data available

RELATIVE DENSITY (25.2 °C): No data available.

BULK DENSITY (kg/m³): No data available

WATER SOLUBILITY (g/l) at 20 °C: Insoluble

N-OCTANOL/WATER (log Po/w): No data available.

AUTOIGNITION TEMPERATURE: No data available.

DECOMPOSITION TEMPERATURE: No data available.

VISCOSITY, DYNAMIC (mPa s): No data available.

EXPLOSIVE PROPERTIES: No data available.

OXIDIZING PROPERTIES: No data available.

10. STABILITY AND REACTIVITY

REACTIVITY: No dangerous reaction known under conditions of normal use.

CHEMICAL STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

POSSIBILITY OF HAZARDOUS REACTIONS: None known

HAZARDOUS DECOMPOSITION PRODUCTS: No data available.

INCOMPATIBLE MATERIALS: Reactive or incompatible with the following materials: Strong oxidizing agents, strong acids and strong bases.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:



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ACUTE TOXICITY: No data available

SKIN CORROSION/IRRITATION: No data available

SERIOUS EYE DAMAGE/IRRITATION: May irritate eyes.

RESPIRATORY OR SKIN SENSITISATION: No data available.

GERM CELL MUTAGENICITY: No data available.

CARCINOGENICITY

IARC: Group 1: Carcinogenic to humans
Crystalline silica (quartz) CAS # 14808-60-7

NTP: Known to be human carcinogen
Crystalline silica (quartz) CAS # 14808-60-7

OSHA: OSHA specifically regulated carcinogen
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REPEATED DOSE TOXICITY: Long term inhalation of crystalline silica dusts may cause lung disease (silicosis). Crystalline silica has been classified as a probable human carcinogen by IARC. Epidemiological studies suggest that respirable crystalline silica has caused both immune system and kidney effects. The mechanisms causing these effects are unclear, and a dose response relationship has not been determined.

EXPERIENCE WITH HUMAN EXPOSURE:

INHALATION: Symptoms: dust particles may cause irritation of the respiratory tract.

SKIN CONTACT: Symptoms: contact may cause irritation.

EYE CONTACT: Symptoms: contact may cause irritation.

INGESTION: Symptoms: Ingestion will probably cause irritation of the digestive tract.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

PERSISTENCE AND DEGRADABILITY:

Biodegradability: No data available.

BIOACCUMULATIVE POTENTIAL:

Bioaccumulation: No data available.

MOBILITY IN SOIL: No data available.

OTHER ADVERSE EFFECTS:

Results of PBT and vPvB Assessment: This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone – CAA Section 602 Class I Substances.



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Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional Ecological Information: No data available.

13. DISPOSAL CONSIDERATIONS

EPA HAZARDOUS WASTE CODE(S): Not applicable.

PRODUCT DISPOSAL: Disposal should be in accordance with applicable regional, federal and local laws and regulations. Do not contaminate ponds, waterways or ditches with chemical or used container.

PACKAGING DISPOSAL: Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with applicable regional, federal and local laws and regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

US DEPARTMENT OF TRANSPORTATION GROUND (49 CFR): Not regulated

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): Not Regulated

INTERNATIONAL MARITIME DANGERS GOODS (IMDG): Not Regulated

15. REGULATORY INFORMATION

EPCRA – EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT

U.S. EPA CERCLA Hazardous Substances (40 CFR 302)

This material does not contain any components with a CERCLA RQ.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

304 EMERGENCY RELEASE NOTIFICATION

This material does not contain any components with a section 304 EHS RQ.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

This material does not contain any components with a SARA 302 RQ.

311/312 HAZARD CATEGORIES: Per the June 13, 2016 Federal Register notice, EPA harmonized the EPCRA 311/312 hazard categories with 2012 OSHA hazard communication standard for classifying and labeling of chemicals (i.e. GHS). Please refer to Section 2 of the SDS to identify the appropriate hazard categories for reporting purposes.

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 REPORTABLE INGREDIENTS: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CLEAN AIR ACT

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).



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This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

NON-VOLATILE (WT): No data available

MASSACHUSETTS RIGHT TO KNOW:

Crystalline silica (quartz) CAS # 14808-60-7

PENNSYLVANIA RIGHT TO KNOW:

Organophilic pylosilicate

Crystalline silica (quartz) CAS # 14808-60-7

NEW JERSEY RIGHT TO KNOW:

Organophilic pylosilicate

Crystalline silica (quartz) CAS # 14808-60-7

CALIFORNIA PROPOSITION 65:

WARNING! This product contains a chemical known to the State of California to cause cancer.

Crystalline silica (quartz) CAS # 14808-60-7

CONEG HEAVY METAL: We confirm that we use packaging and/or packaging components in which the sum of the incidental concentration levels of lead, mercury, cadmium and hexavalent chromium do not exceed 100 parts per million by weight.

THE COMPONENTS OF THIS PRODUCT ARE REPORTED IN THE FOLLOWING INVENTORIES:

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: We certify that all of the components of this product are either listed on the TSCA inventory or are not subject to the notification requirements per 40 CFR 720 30 (h).

TSCA SECTION 12(b): This product does not contain chemicals that are required to be notified under the TSCA 12(b) Export Notification.

DSL: We certify that all of the components of this product are listed on the DSL.

16. OTHER INFORMATION

Details of the manufacturer of the product:

Manufacturer: Zhejiang Fenghong New Material Co. Ltd.
Address: Tangpu Developing Zone, Anji County, Zhejiang Province, China. P.C.313300
E-mail: Bentonite@zjfenghong.com
Telephone: +86-571-63806068, 63711876
Fax: +86-571-63751569, 63806098

ABBREVIATIONS AND ACRONYMS:

ACGIH - American Conference of Governmental Industrial Hygienists
CAS - Chemical Abstracts Service
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CFR - Code of Federal Regulations
DOT - Department of Transportation
GHS - Global Harmonized System
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association



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ICAO - International Civil Aviation Organization
IMDG - International Maritime Dangerous Goods
IMO - International Maritime Organization
LD50 - Lethal Dose, 50%
NIOSH - The National Institute for Occupational Safety and Health
OECD - Organization for Economic Co-operation and Development
OSHA - Occupational Safety and Health Administration
PMCC - Pensky-Martens Closed Cup
PPE - Personal Protective Equipment
NTP - National Toxicology Program
RQ - Reportable Quantity
SARA - Superfund Amendments and Reauthorization Act
SDS - Safety Data Sheet
STOT - Specific Target Organ Toxicity
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average

MANUFACTURER DISCLAIMER: This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process is the responsibility of the user.