

SECTION 1: Identification**1.1. Identification**

Product form : Mixture
Product name : Nano Mold Coating HCF (Parts A & B)

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Coating solution

1.3. Supplier

Nanoplas Inc.
2950 Prairie Street South West
Suite 900
Grandville, MI, 49418
T (616)-452-3707
info@nanomoldcoating.com

1.4. Emergency telephone number



Emergency number : For Chemical Emergency Call INFOTRAC 24hr/day 7days/week
Within USA and Canada: ...
Outside USA and Canada: ...
(collect calls accepted)
Within USA, Mexico and Canada: 800-535-5053 ID# 102222
Outside USA, Mexico and Canada: 1-352-323-3500 ID# 102222

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS US classification**

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Eye irritation Category 2A	H319	Causes serious eye irritation
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements**GHS US labeling**

Hazard pictograms (GHS US) :  

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing vapors, mist.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P312 - Call a poison center or doctor if you feel unwell.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO₂), dry extinguishing powder to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to a hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : None known.

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Propan-2-ol, isopropyl alcohol, isopropanol	CAS-No.: 67-63-0	80-<100

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation : Move the affected person to fresh air. Get medical attention if symptoms occur.
First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Get medical advice/attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Causes serious eye irritation. May cause drowsiness or dizziness.
Inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.
Skin : May cause slight irritation to the skin.
Eyes : Causes serious eye irritation.
Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

Chronic symptoms : None known.

4.3. Immediate medical attention and special treatment, if necessary

Not required.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical, CO₂, dry sand, or alcohol-resistant foam.
Unsuitable extinguishing media : None.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. On burning: release of carbon monoxide - carbon dioxide. Formaldehyde.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO₂). Formaldehyde.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Cool down the containers exposed to heat with a water spray.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Complete protective clothing. Self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate ignition sources. Ventilate area. Avoid contact with eyes, skin and clothing. Keep unnecessary and unprotected personnel away from the spillage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate area. Eliminate ignition sources. No open flames, no sparks, and no smoking. Wear suitable protective clothing. Avoid breathing mist, spray, vapors. Avoid contact with skin, eyes and clothing. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Ventilate area. Absorb and/or contain spill with inert material, then place in suitable container. No open flames, no sparks, and no smoking. Use non-sparking tools. Use personal protective equipment as required. Notify authorities if product enters sewers or public waters.
Other information : Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of contaminated materials refer to section 13: "Disposal considerations".

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure adequate ventilation. Use explosion-proof equipment. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use only non-sparking tools. Flammable vapors may accumulate in the container. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Avoid breathing mist, spray, vapors. Avoid contact with eyes, skin and clothing. Keep container closed when not in use. Refer to product label for additional information on use and handling. Handle in accordance with good industrial hygiene and safety procedures.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store locked up. Keep container tightly closed. Store in a cool, well-ventilated place.
- Incompatible materials : Strong oxidizers. Sources of ignition.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

USA - ACGIH - Occupational Exposure Limits

Local name	2-Propanol
ACGIH OEL TWA	200 ppm
ACGIH OEL STEL	400 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2024

USA - ACGIH - Biological Exposure Indices

Local name	2-Propanol
BEI (BLV)	40 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B, Ns
Regulatory reference	ACGIH 2024

USA - OSHA - Occupational Exposure Limits

Local name	Isopropyl alcohol
OSHA PEL (TWA)	980 mg/m ³ 400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

- Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Use spark-/explosionproof appliances and lighting system.
- Environmental exposure controls : Avoid release to the environment.

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

No respiratory protection needed under normal use conditions. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Thermal hazard protection:

Not applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Colorless liquid.
Color	: Colorless
Odor	: mild
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 82 °C
Flash point	: 12 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 0.998
Solubility	: In water, material is partially soluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: 399 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: 1.7 mm ² /s
Viscosity, dynamic	: No data available
Explosion limits	: Lower explosion limit: 2 vol % Upper explosion limit: 13 vol %
Explosive properties	: vapors may form flammable and explosive mixture with air.
Oxidizing properties	: None.

9.2. Other information

No additional information available

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition. Avoid contact with hot surfaces. Heat.

10.5. Incompatible materials

Keep away from oxidizers, strong acids and strong bases. Keep away from ignition sources (including static discharges).

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

LD50 oral rat	5840 mg/kg
LD50 dermal rabbit	16.4 ml/kg
LC50 Inhalation - Rat [ppm]	1666.66 ppm/1h
ATE US (oral)	5840 mg/kg body weight
ATE US (dermal)	16400 mg/kg body weight
ATE US (gases)	833.33 ppmV/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified. This product does not contain any component that is considered a carcinogen by IARC, ACGIH, OSHA or NTP.

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause drowsiness or dizziness.

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

Aspiration hazard : Not classified
Viscosity, kinematic : 1.7 mm²/s

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

Viscosity, kinematic : 2.58 mm²/s

Symptoms/effects : Causes serious eye irritation. May cause drowsiness or dizziness.
Inhalation : May cause minor irritation to the respiratory tract and to other mucous membranes.
Skin : May cause slight irritation to the skin.
Eyes : Causes serious eye irritation.
Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms : None known.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

LC50 - Fish [1]	10000 mg/l Pimephales promelas (Fathead minnow)
EC50 - Crustacea [1]	> 10000 mg/l
LC50 - Fish [2]	9640 mg/l Pimephales promelas (Fathead minnow)
NOEC chronic crustacea	3.37 mg/l

12.2. Persistence and degradability

Nano Mold Coating HCF (Parts A & B)

Persistence and degradability : No additional information available.

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

Persistence and degradability : Readily biodegradable.

12.3. Bioaccumulative potential

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

BCF - Fish [1]	3
Partition coefficient n-octanol/water (Log Kow)	0.05

12.4. Mobility in soil

Propan-2-ol, isopropyl alcohol, isopropanol (67-63-0)

Organic Carbon Normalized Adsorption Coefficient (Log Koc) : 1.5

12.5. Other adverse effects

No additional information available

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard




SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Dispose of in accordance with applicable federal, state, and local regulations.
 Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
 Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
1219	1219	1219
14.2. Proper Shipping Name		
Isopropanol	ISOPROPANOL (ISOPROPYL ALCOHOL)	Isopropanol
14.3. Transport hazard class(es)		
3	3	3
		
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

DOT
 UN-No.(DOT) : UN1219
 DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
 T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
 TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 4b, 150
 DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
 DOT Packaging Bulk (49 CFR 173.xxx) : 242
 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
 DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

IMDG
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG) : B
Flash point (IMDG) : 12°C c.c.
Properties and observations (IMDG) : Colourless, mobile liquid. Flashpoint: 12°C c.c. Explosive limits: 2% to 12%. Miscible with water.

IATA
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provision (IATA) : A180
ERG code (IATA) : 3L

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Nano Mold Coating HCF (Parts A & B)

CERCLA RQ	0 lb
SARA Section 311/312 Hazard Classes	Refer to Section 2 for OSHA Hazard Classification.

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Heat Cure HCF (Parts A & B)

Safety Data Sheet

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

Component	State or local regulations
Propan-2-ol, isopropyl alcohol, isopropanol(67-63-0)	U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

According to 29CFR 1910.1200 OSHA Hazard Communication Standard

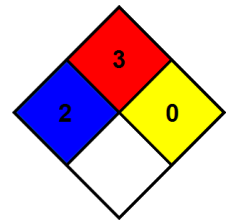
Revision date : 5/14/2024

Full text of H-phrases	
H225	Highly flammable liquid and vapor
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB IC)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Indication of changes:

new version.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.