

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : DRI KOTE
Product code : DK-300-12C

1.2. Recommended use and restrictions on use

Recommended use : Mold Release Agent
Restrictions on use : None known

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 aerosol Category 1	H222	Extremely flammable aerosol
	H229	Pressurized container: may burst if heated
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness
Aspiration hazard Category 1	H304	May be fatal if swallowed and enters airways
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) :
H222 - Extremely flammable aerosol
H229 - Pressurized container: may burst if heated
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness

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Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Pressurized container: Do not pierce or burn, even after use.
P261 - Avoid breathing mist, spray, vapors.
P264 - Wash hands thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves.
P301+P310 - If swallowed: Immediately call a poison center or doctor.
P331 - Do NOT induce vomiting.
P302+P352 - If on skin: Wash with plenty of water.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
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.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
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	%
Propane	CAS-No.: 74-98-6	60-70
Butane	CAS-No.: 106-97-8	25-35
Heptane, branched, cyclic and linear	CAS-No.: 426260-76-6	1-5
heptane, n-heptane	CAS-No.: 142-82-5	<1

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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 physician immediately.
First-aid measures after inhalation : Move the affected person to fresh air. Get medical attention if symptoms occur.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. Get medical advice if skin irritation persists.
First-aid measures after eye contact : Rinse eyes with water as a precaution. Get medical attention if irritation develops and persists.
First-aid measures after ingestion : Do NOT induce vomiting. Call a physician immediately.

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

Symptoms/effects	: Aspiration hazard. May be fatal if swallowed and enters airways. Causes skin irritation. May cause minor eye irritation. May cause drowsiness or dizziness.
Inhalation	: High concentration of vapors may induce: headache, nausea, dizziness. Intentional abuse may be harmful or fatal. May cause minor irritation to the respiratory tract and to other mucous membranes.
Skin	: Causes skin irritation.
Eyes	: May cause minor eye irritation.
Ingestion	: Aspiration hazard. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	: No adverse effects expected under normal conditions of use.

4.3. Immediate medical attention and special treatment, if necessary

Aspiration hazard. If accidentally swallowed obtain immediate medical attention.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire. Use dry chemical, CO ₂ , water spray or regular foam.
Unsuitable extinguishing media	: None.

5.2. Specific hazards arising from the chemical

Fire hazard	: Extremely flammable aerosol. Keep away from open flames, hot surfaces and sources of ignition. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. Exposure to fire may cause containers to rupture/explode.
Explosion hazard	: Contains gas under pressure; may explode if heated. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. On heating, there is a risk of bursting due to internal pressure build-up. Cool down the containers exposed to heat with a water spray.
Protection during firefighting	: Use shielding to protect from bursting cans. Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Eliminate all ignition sources. Ventilate area. Wear suitable protective clothing. Avoid contact with eyes, skin and clothing.
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6.1.1. For non-emergency personnel

Emergency procedures	: No open flames, no sparks, and no smoking. Avoid breathing mist, spray, vapors. Avoid contact with skin and eyes.
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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".
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6.2. Environmental precautions

Avoid release to the environment.

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6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Absorb and/or contain spill with inert material, then place in suitable container. 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".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure adequate ventilation. Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Unplug electrical tools, motors, and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances, or any other source of electricity. Pressurized container: Do not pierce or burn, even after use. Wear personal protective equipment. Avoid breathing mist, spray, vapors. Avoid contact with eyes, skin and clothing.
- Hygiene measures : Wash contaminated clothing before reuse. 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 : U.F.C. (NFPA 30B) Level III Aerosol.
- Storage conditions : Store in a cool, well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.
- Incompatible materials : Strong oxidizers. Direct sunlight. Sources of ignition. None known.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Propane (74-98-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Propane
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Propane
OSHA PEL (TWA)	1800 mg/m³
	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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Butane (106-97-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Butane
ACGIH OEL STEL	1000 ppm (EX - Explosion hazard)
Remark (ACGIH)	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2024

heptane, n-heptane (142-82-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Heptane, isomers (n-Heptane)
ACGIH OEL TWA	400 ppm
ACGIH OEL STEL	500 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; URT irr
Regulatory reference	ACGIH 2024

USA - OSHA - Occupational Exposure Limits	
Local name	Heptane (n-Heptane)
OSHA PEL (TWA)	2000 mg/m³
	500 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.
- Environmental exposure controls
- : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable gloves
Eye protection:
Use suitable eye protection
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. 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.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Amber. Semi-hazy liquid.
Color	: Amber
Odor	: Solvent
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: -104 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 0.577
Solubility	: Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: < 20.5 mm ² /s
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Particle Characteristics	: Not applicable

9.2. Other information

VOC content	: 98.94 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

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

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

Keep away from open flames, hot surfaces and sources of ignition. Do not puncture or incinerate containers.

10.5. Incompatible materials

Keep away from oxidizers, strong acids and strong bases.

10.6. Hazardous decomposition products

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

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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

Propane (74-98-6)

LC50 Inhalation - Rat [ppm]	> 20000 ppm/4h
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Butane (106-97-8)

LC50 Inhalation - Rat [ppm]	> 20000 ppm/4h
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heptane, n-heptane (142-82-5)

LD50 oral rat	> 5000 mg/kg body weight
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LD50 dermal rabbit	> 2000 mg/kg
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LC50 Inhalation - Rat	> 29300 mg/m ³
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Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Not classified
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.
Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.

Heptane, branched, cyclic and linear (426260-76-6)

STOT-single exposure	May cause drowsiness or dizziness.
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heptane, n-heptane (142-82-5)

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

heptane, n-heptane (142-82-5)

LOAEC (inhalation, rat, vapor, 90 days)	16.6 mg/l air Animal: rat, Animal sex: male
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NOAEC (inhalation, rat, vapor, 90 days)	3.3 mg/l air Animal: rat, Animal sex: male
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Aspiration hazard : May be fatal if swallowed and enters airways.
Viscosity, kinematic : < 20.5 mm²/s

heptane, n-heptane (142-82-5)

Viscosity, kinematic	0.641 mm ² /s at 20 C
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Symptoms/effects : Aspiration hazard. May be fatal if swallowed and enters airways. Causes skin irritation. May cause minor eye irritation. May cause drowsiness or dizziness.
Inhalation : High concentration of vapors may induce: headache, nausea, dizziness. Intentional abuse may be harmful or fatal. May cause minor irritation to the respiratory tract and to other mucous membranes.
Skin : Causes skin irritation.
Eyes : May cause minor eye irritation.
Ingestion : Aspiration hazard. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms : No adverse effects expected under normal conditions of use.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No toxicity data available for product. This product is expected to be harmful to the aquatic environment. Releases to the environment should be avoided.

heptane, n-heptane (142-82-5)

EC50 - Crustacea [1]	3.9 mg/l
LOEC (chronic)	0.32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

DRI KOTE

Persistence and degradability	No additional information available.
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Propane (74-98-6)

Persistence and degradability	Not applicable.
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Butane (106-97-8)

Persistence and degradability	Not applicable.
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Heptane, branched, cyclic and linear (426260-76-6)

Persistence and degradability	Inherently biodegradable.
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heptane, n-heptane (142-82-5)

Persistence and degradability	Readily biodegradable.
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

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.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
1950	1950	1950

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DOT	IMDG	IATA
14.2. Proper Shipping Name		
Aerosols	AEROSOLS	Aerosols, flammable
14.3. Transport hazard class(es)		
2.1	2.1	2.1
		
14.4. Packing group		
Not applicable	Not applicable	Not applicable
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)	: UN1950
DOT Special Provisions (49 CFR 172.102)	: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 306
DOT Packaging Non Bulk (49 CFR 173.xxx)	: None
DOT Packaging Bulk (49 CFR 173.xxx)	: None
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 25 - Protected from sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

IMDG

Special provision (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Packing instructions (IMDG)	: P207, LP200
Packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES
EmS-No. (Spillage)	: S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

IATA

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provision (IATA)	: A145, A167, A802

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ERG code (IATA) : 10L

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

DRI KOTE

SARA Section 311/312 Hazard Classes	Refer to Section 2 for OSHA Hazard Classification.
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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

Component	State or local regulations
Propane(74-98-6)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - New Jersey - Right to Know Hazardous Substance List
Butane(106-97-8)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - New Jersey - Right to Know Hazardous Substance List
heptane, n-heptane(142-82-5)	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 : 7/19/2024

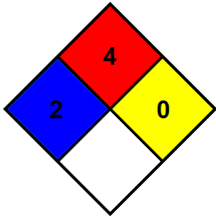
Full text of H-phrases

H222	Extremely flammable aerosol
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness

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NFPA health hazard	: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.	
NFPA fire hazard	: 4 - Materials that rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and burn readily.	
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	: 4 Severe Hazard - Flammable gases, or very volatile flammable liquids with flash points below 73 F, and boiling points below 100 F. Materials may ignite spontaneously with air. (Class IA)	
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:

revised edition. All chapters have been modified since the previous 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.