Safety Data Sheet
acc. to OSHA HCS

Printing date 07/02/2024 *Version 5.0* *Last revision 06/01/2024*

* 1 Identification

· **Product name: Mold Release Spray, PTFE Based**

· **Part number:** 200-10006

· **Application of the substance / the mixture** Releasing agent

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Allied High Tech Products Inc.
16207 Carmenita Road
USA-Cerritos, CA, 90703
USA
info@alliedhightech.com

· **Information department:** Product safety department
· **Emergency telephone number:**
During normal opening times: +1 (310) 635-2466
Chemtrec: +1 (202) 483-7616

2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS02 Flame

Flammable Aerosols 1 — H222 Extremely flammable aerosol.


GHS04 Gas cylinder

Gases under Pressure - Compressed gas — H280 Contains gas under pressure; may explode if heated.


GHS08 Health hazard

Toxic to Reproduction 2 — H361 Suspected of damaging fertility or the unborn child.
Aspiration Hazard 1 — H304 May be fatal if swallowed and enters airways.


GHS09 Environment

Aquatic Chronic 2 — H411 Toxic to aquatic life with long lasting effects.


GHS07

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Skin Irritation 2	H315 Causes skin irritation.
Eye Irritation 2A	H319 Causes serious eye irritation.
Specific Target Organ Toxicity - Single Exposure 3	H336 May cause drowsiness or dizziness.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS02 GHS04 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labeling:**
2-methylpentane
n-hexane
3-methylpentane
isopropyl alcohol
· **Hazard statements**
Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.
Toxic to aquatic life with long lasting effects.
· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Avoid breathing dust/fume/gas/mist/vapors/spray
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Immediately call a poison center/doctor.
Specific treatment (see on this label).
Do NOT induce vomiting.
If on skin: Wash with plenty of water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF exposed or concerned: Get medical advice/attention.
Call a poison center/doctor if you feel unwell.
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Collect spillage.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Protect from sunlight. Store in a well-ventilated place.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

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Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Hazardous components and components with occupational exposure limits:**		
75-37-6	1,1-difluoroethane Flammable Liquids 1, H224	40-50%
67-63-0	isopropyl alcohol Flammable Liquids 2, H225; Eye Irritation 2A, H319; Specific Target Organ Toxicity - Single Exposure 3, H336	10-<20%
107-83-5	2-methylpentane Flammable Liquids 2, H225; Aspiration Hazard 1, H304; Aquatic Chronic 2, H411; Skin Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H336	10-<20%
96-14-0	3-methylpentane Flammable Liquids 2, H225; Aspiration Hazard 1, H304; Aquatic Chronic 2, H411; Skin Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H336	5-<10%
75-83-2	2,2-dimethylbutane Flammable Liquids 2, H225; Aspiration Hazard 1, H304; Aquatic Chronic 2, H411; Skin Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H336	2.5-<5%
79-29-8	2,3-dimethylbutane Flammable Liquids 2, H225; Aspiration Hazard 1, H304; Aquatic Chronic 2, H411; Skin Irritation 2, H315; Specific Target Organ Toxicity - Single Exposure 3, H336	2.5-<5%
110-54-3	n-hexane Flammable Liquids 2, H225; Toxic to Reproduction 2, H361; Acute Toxicity - Inhalation 4, H332	0.1-≤1%

· **Additional information:** The specific chemical identity and/or exact percentage of the composition has been withheld as a trade secret.

4 First-aid measures

· **Description of first aid measures**
· **General information:** Immediately remove any clothing soiled by the product.
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:** If symptoms persist consult doctor.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed**
Redness
Swelling
Headache
Dizziness
Nausea
Dermatitis
Eye irritation
· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** Wear fully protective suit.

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6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources
· **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
· **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Protect from heat and direct sunlight.
Ensure proper ventilation/exhaustion at workplaces.
Open and handle receptacle with care.
· **Information about protection against explosions and fires:**
Do not spray on a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Protect from sunlight.
Store at temperatures not exceeding 49°C.
Observe official regulations on storing packagings with pressurized containers.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store receptacle in a well ventilated area.
· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No additional data. See 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

67-63-0 isopropyl alcohol	
PEL	Long-term value: 980 mg/m³, 400 ppm
REL	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm
TLV	Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4

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107-83-5 2-methylpentane	
REL	Long-term value: 350 mg/m³, 100 ppm Ceiling limit value: 1800* mg/m³, 510* ppm *15-min
TLV	Long-term value: 200 ppm A3
96-14-0 3-methylpentane	
REL	Long-term value: 350 mg/m³, 100 ppm Ceiling limit value: 1800* mg/m³, 510* ppm *15-min
TLV	Long-term value: 200 ppm A3
75-83-2 2,2-dimethylbutane	
REL	Long-term value: 350 mg/m³, 100 ppm Ceiling limit value: 1800* mg/m³, 510* ppm *15-min
TLV	Long-term value: 200 ppm A3
79-29-8 2,3-dimethylbutane	
REL	Long-term value: 350 mg/m³, 100 ppm Ceiling limit value: 1800* mg/m³, 510* ppm *15-min
TLV	Long-term value: 200 ppm A3
110-54-3 n-hexane	
PEL	Long-term value: 1800 mg/m³, 500 ppm
REL	Long-term value: 180 mg/m³, 50 ppm
TLV	Long-term value: 50 ppm Skin; BEI

· **Ingredients with biological limit values:**

67-63-0 isopropyl alcohol	
BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
110-54-3 n-hexane	
BEI	0.5 mg/L Medium: urine Time: end of shift Parameter: 2.5-Hexanedione without hydrolysis

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
· **Breathing equipment:** Use suitable respiratory protective device when high concentrations are present.

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· **Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Aerosol
Color:	White
· **Odor:**	Alcohol-like
· **Odor threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Not applicable, as aerosol.
· **Flash point:**	Not applicable, as aerosol.
· **Flammability (solid, gaseous):**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Ignition temperature:**	Product is not selfigniting.
· **Danger of explosion:**	Not determined.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure at 20 °C (68 °F):**	5,066 hPa (3.866 mm Hg)
· **Density:**	Not determined.
· **Relative density**	Not determined.
· **Vapor density**	>1 (Air = 1)
· **Specific gravity at 20 °C (68 °F):**	0.82
· **Evaporation rate**	>1 (BuAc = 1)
· **Solubility in / Miscibility with**	
Water:	Partly miscible.
· **Partition coefficient (n-octanol/water):**	Not determined.

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· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	22.5 %
VOC content:	40.54 %
Solids content:	0.0 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid**
Keep away from oxidising agents and acidic substances.
Keep away from heat.
Keep away from open flames. - No smoking.
· **Incompatible materials:** Chlorine
· **Hazardous decomposition products:** Carbon monoxide and carbon dioxide
· **Additional information:** Hazardous decomposition products may form during combustion.

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
75-37-6 1,1-difluoroethane		
Inhalative	LC50/4 h	977 mg/l (mouse)
67-63-0 isopropyl alcohol		
Oral	LD50	5,045 mg/kg (rat)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)
110-54-3 n-hexane		
Inhalative	LC50/4 h	11 mg/l (ATE)

· **Primary chemical irritant effect:**
· **on the skin:** Irritant to skin and mucous membranes.
· **on the eye:** Irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
Specific Target Organ Toxicity - Single Exposure 3 - Target Organ: central nervous system depression

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**		
67-63-0	isopropyl alcohol	3

· **NTP (National Toxicology Program)**
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.

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12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**	
LC50 (96 h)	11,130 mg/l (pimephales promelas)

110-54-3 n-hexane	
LC50 (96 h)	2.981 mg/l (pimephales promelas)

· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** May be accumulated in organism
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Toxic for fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:** Contact waste processors for recycling information.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**	
· **DOT, IMDG, IATA**	UN1950
· **UN proper shipping name**	
· **DOT**	Aerosols, flammable
· **IMDG**	AEROSOLS, MARINE POLLUTANT
· **IATA**	AEROSOLS, flammable

· **Transport hazard class(es)**

· **DOT**

· **Class**	2.1 Gases
· **Label**	2.1

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· **IMDG**

· **Class**	2.1 Gases
· **Label**	2.1

· **IATA**

· **Class**	2.1 Gases
· **Label**	2.1
· **Packing group**	
· **DOT, IMDG, IATA**	not regulated
· **Environmental hazards:**	Product contains environmentally hazardous substances: 2-methylpentane
· **Marine pollutant:**	No Symbol (fish and tree)
· **Special precautions for user**	Warning: Gases
· **Hazard identification number (Kemler code):**	-
· **EMS Number:**	F-D,S-U
· **Stowage Code**	SW1 Protected from sources of heat. SW2 Clear of living quarters.
· **Segregation Code**	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **DOT**	
· **Quantity limitations**	On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg
· **Limited quantities (LQ)**	1L
· **Transport category**	2
· **Tunnel restriction code**	D
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **UN "Model Regulation":**	UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.

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· **Sara**

· **Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**	
67-63-0	isopropyl alcohol
110-54-3	n-hexane

· **TSCA (Toxic Substances Control Act):**
All components have the value ACTIVE.

· **Hazardous Air Pollutants**	
110-54-3	n-hexane

· **Proposition 65**

· **Chemicals known to cause cancer:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**	
110-54-3	n-hexane

· **Chemicals known to cause developmental toxicity:**
None of the ingredients is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

To the best of our knowledge, the information contained herein is accurate. However, it does not describe a guarantee of product properties and does not establish a contractual legal relationship.

· **Department issuing SDS:** Technical Services
· **Contact:** Pablo Mendoza
· **Last revision / supersedes version:** 06/01/2024 / 4.0
· **Supersedes date:** 06/01/2022
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flammable Aerosols 1: Aerosols – Category 1
Gases under Pressure - Compressed gas: Gases under pressure – Compressed gas
Flammable Liquids 1: Flammable liquids – Category 1
Flammable Liquids 2: Flammable liquids – Category 2
Acute Toxicity - Inhalation 4: Acute toxicity – Category 4
Skin Irritation 2: Skin corrosion/irritation – Category 2
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
Toxic to Reproduction 2: Reproductive toxicity – Category 2
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3
Aspiration Hazard 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
· *** Data compared to the previous version altered.**