SECTION 1. IDENTIFICATION

PRODUCT NAME: RELEASAGEN® H-15-1N AEROSOL

Product Use: Release agent Restrictions on Use: None

Marketer:

Releasagen Manufacturing, Inc. 116 Maple Ridge Circle Delano, MN 55328

Telephone: 800-445-1885 or 763-972-3244 - Fax: 763-972-6121 e-mail: <u>releasagen@msn.com</u> Emergency Response: INFOTRAC – Tel: 800-535-5053

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification:

Physical	Health
Flammable Aerosol Category 1	Skin Irritation Category 2
Gas Under Pressure: Compressed Gas	Aspiration Toxicity Category 1
	Specific Target Organ Toxicity Single Exposure
	Category 3 (Nervous System)

Label Elements: DANGER!



Hazard statements

Extremely Flammable Aerosol. Contains gas under pressure; may explode if heated Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.

Prevention

Keep away from heat, sparks, open flames, and 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 mist, vapors or spray

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Precautionary statement(s)

Response

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

Storage & Disposal

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye protection. Store locked up. Dispose of contents and container in accordance with local and national regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Percent by Wt.
Heptane	142-82-5	55-65
Liquefied Petroleum Gas	68476-85-7	35-40
Non-hazardous Ingredients	Proprietary	1-5

The specific identity and/or exact concentration has been withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

Eye: Flush eyes with large amounts of water for several minutes, holding the eyelids apart. Get medical attention if irritation occurs or persists.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. If irritation develops or persists, get medical attention. Launder clothing before re-use.

Ingestion: If conscious, rinse mouth with water. Never give anything by mouth to an unconscious person. Aspiration hazard. <u>Do not induce vomiting</u>. Get immediate medical attention.

Inhalation: Remove to fresh air. If breathing is difficult have qualified personnel administer oxygen. Get medical attention if irritation or symptoms persists.

Most important symptoms/effects, acute and delayed: Causes skin irritation. Prolonged skin contact may cause drying or defatting of the skin. May cause eye irritation. Inhalation of vapors may cause respiratory irritation and central nervous system effects. Harmful or fatal if swallowed. May be aspirated into the lungs during swallowing or vomiting and cause severe lung damage.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention is required for ingestion.

SECTION 5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use dry chemical, foam, carbon dioxide, or water spray. **Specific hazards arising from the chemical:** Contents under pressure. Extremely flammable aerosol. Highly flammable liquid and vapor. Containers exposed to heat and flames may explode. Vapors are heavier than air and may travel to remote ignition sources and flash back. Vapors may form explosive mixtures with air in confined or poorly ventilated areas. Product may float and be reignited on the water surface. Hot organic vapors or mists may be susceptible to spontaneous combustion when mixed with air. Combustion may produce oxides of carbon and nitrogen, smoke and incompletely burned hydrocarbons.

Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Use shielding to protect from bursting containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear protective equipment as described in Section 8. Remove all sources of ignition and ventilate the area with explosion proof equipment. Use non-sparking tools and equipment.

Environmental hazards: Avoid release into the environment. Report releases to the environment to appropriate authorities.

Methods and materials for containment and cleaning up: Place leaking cans in a well ventilated area away from any source of ignition, contain released liquid and allow the propellant to dissipate. Collect liquid with absorbent material and place in a closed container for disposal. Thoroughly clean spill area.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Avoid breathing vapors. Avoid contact with the skin and eyes and clothing. Do not spray toward body. Use only in accordance with directions. Do not eat, drink or smoke in the work area. Use only with adequate ventilation. Keep away from all sources of ignition. Do not allow can to contact any source of electricity. Electricity can cause rupture of container and fire. Do not puncture, crush or incinerate containers., even when empty. Take precautions against static buildup during use. Static sparks can be a source of ignition.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well-ventilated place, away from sources of heat, flames or other sources of ignition, oxidizing agents and other incompatible materials. Do not store above 120°F or in direct sunlight. NFPA 30B Level 3 Aerosol.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Heptane	500 ppm TWA OSHA PEL	
	400 ppm TWA, 500 ppm STEL ACGIH TLV	
Liquefied Petroleum Gas	1000 ppm TWA OSHA PEL	
Non-hazardous Ingredients	None Established	

Appropriate engineering controls: Use general or local exhaust ventilation as needed to maintain exposure levels below the occupational exposure limits. Use explosion-proof equipment where required.

Individual protection measures, such as personal protective equipment:

Respiratory Protection: If the exposure limits are exceeded or irritation is experienced, a NIOSH approved organic vapor respirator may be worn. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Skin Protection: Wear impervious gloves. Refer to glove supplier for assistance in selection of a glove that is impervious to the solvents in this product.

Eye Protection: Chemical safety goggles recommended.

Other: Wear impervious clothing if needed to avoid skin contact and contamination of personal clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Liquid packaged. **Odor:** Solvent odor

Odor threshold: Approx. 200 mg/m3 (heptane) pH: Not applicable Melting point/freezing point: Not determined **Boiling point:** -44° - 209° F Flash point: -156°F (estimated propellant) Evaporation rate: Approx. 4.5 (heptane) Flammability (solid, gas): Propellant is a flammable Can Pressure: Approx. 50 psig gas Flammable limits: LEL: 1.05% **UEL: 15%** Vapor density: 3.45 (heptane) Vapor pressure: 46 mmHg @ 25°C (heptane) **Relative density**: <1 Solubility: Insoluble in Water Partition coefficient: n-octanol/water: Not Auto-ignition temperature: 545°F (285°C) (heptane) applicable

Decomposition temperature: Not available

Viscosity: Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical stability: Stable

Possibility of hazardous reactions: None known.

Conditions to avoid: Keep away from heat, sparks, flames and all other sources of ignition.

Incompatible materials: Oxidizing agents, strong acids and bases.

Hazardous decomposition products: Thermal decomposition may yield oxides of carbon, smoke and incompletely burned hydrocarbons.

SECTION 11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Ingestion: Irritating to mouth, throat and stomach. May produce nervous system effects, which include drowsiness, dizziness, and unconsciousness. Aspiration hazard. May be aspirated into the lungs during swallowing or vomiting and cause severe lung damage.

Inhalation: High concentrations may cause central nervous system effects including drowsiness, dizziness, nausea, headaches, and loss of consciousness. Intentional misuse by concentrating and inhaling solvent vapors may be fatal.

Eye: May cause irritation with tearing, reddening, and swelling.

Skin: Causes skin irritation. Prolonged and repeated contact can cause defatting and drying of the skin resulting in dermatitis.

Sensitization: Not expected to occur.

Chronic: None known.

Carcinogenicity: None of the components are listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

Mutagenicity: Components are not mutagens.

Acute Toxicity Values:

Heptane: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >29.29 mg/L/4 hr; Dermal rabbit LD50 >2000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Heptane: Heptane: 24 hr LC50 Goldfish – 4 mg/L; 24 hr EC50 Daphnia magna – >10 mg/L **Persistence and degradability:** Heptane is readily biodegradable. **Bioaccumulative potential:** Heptane has a calculated BCF of 552, which suggests that it may bioaccumulate.

Mobility in soil: Heptane is highly mobile in soil.

Other adverse effects: None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose according to local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN1950	Aerosols	2.1	N/A	No

RELEASAGEN® H-15-1N AEROSOL

IATA/	UN1950	Aerosols, flammable	2.1	N/A	No
ICAO					
IMDG	UN1950	Aerosols	2.1	N/A	Marine Polutant
					(Heptane)

Note: This product can be shipped ground until 2020 as Consumer Commodity, OR-D

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None Known

SECTION 15. REGULATORY INFORMATION

Safety, health, and environmental regulations specific for the product in question.

CERCLA: This product has no RQ but oil spills are reportable. Some states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Fire Hazard, Acute Health, Pressure Hazard

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None above deminimus concentration

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

SECTION 16. OTHER INFORMATION

NFPA Rating: Health = 1Fire = 4Instability = 0HMIS Rating: Health = 1Fire = 4Physical Hazard = 04 = Severe Hazard 3 = Serious Hazard 2 = Moderate Hazard 1 = Slight Hazard 0 = Minimal Hazard* chronic health hazard

REVISION SUMMARY:

SDS Revision History: All section revised – Converted to GHS format **Date of preparation:** May 28, 2015

NOTICE

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Releasagen Manufacturing, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.