1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Name: ReleaSys™ 89S
High Performance Release Agent

Product Use: Release Agent

MANUFACTURER/DISTRIBUTOR:

Miller-Stephenson Chemical
55 Backus Ave.
Danbury, Conn. 06810 USA
(203) 743-4447

Emergency Phone Number:
(800) 424-9300

2. HAZARDS IDENTIFICATION

Hazard classification
Flammable aerosols: Category 2
Aspiration hazard: Category 1
Skin corrosion/irritation: Category 2
Specific target organ toxicity - single exposure: Category 3

Label elements:
Signal word
Danger

Pictograms

Hazard Statements
Flammable aerosol.
Pressurized container: may burst if heated.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause drowsiness or dizziness.

Precautionary Statements
Keep away from heat/sparks/open flames/hot surfaces and other ignition sources – No smoking.
Do not spray on an open flame or other ignition source.
Do not pierce or burn, even after use.
Avoid breathing mist/vapors/spray.
Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF ON SKIN: Wash with plenty of soap and water.
IF SKIN irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
In case of fire: Use dry sand, dry chemical or alcohol-resistant form for extinction.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Dispose of contents/container in accordance with local, regional, or international regulations.

3. INGREDIENTS

Material (s)	CAS No.	Approximate %
Naphtha (petroleum), hydrotreated light	64742-49-0	55 – 60
Naphtha (petroleum), hydrotreated heavy	64742-48-9	1 - 3
1,1,1,2-Tetrafluoroethane	811-97-2	35 – 45

4. FIRST AID MEASURES

Inhalation: Remove patient to fresh air immediately and keep at rest in a position comfortable for breathing. Get medical attention immediately.

Eye: Flush with large amounts of water immediately, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue to rinse. Get medical attention immediately.

Skin: Take off immediately all contaminated clothing. Wash affected area with soap and water and rinse with large amounts of water for 15 minutes. Get medical attention immediately.

Oral: Do not induce vomiting. Never give anything to mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician or poison control center, treat symptomatically.

Most important symptoms/effects, acute and delayed: Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to the hospital. Keep victim under observation. Symptoms may be delayed.

General information: Take off all contaminated clothing immediately. Wash contaminated clothing before use. Ensure the medical personnel are aware of the material involved (show the label, if possible), and take precautions to protect themselves. Have the safety data sheet available.

5. FIRE FIGHTING MEASURES

Flammability: This product is flammable. **Test Method:** Ignition distance test and Enclosed space ignition test

Fire and Explosion: Flammable aerosol. Containers may rupture under fire conditions. Decomposition may occur. Vapors are heavier than air. Vapors or gases may ignite at distant ignition sources and flash back.

Suitable Extinguishing Media: Water fog, Foam, Dry chemical, Carbon dioxide (CO2)

Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.

Special Fire Fighting Instruction: Use water spray to cool containers. Do not allow run-off from firefighting to enter drains and water sources. Do not breathe fumes or vapors from fire. Self-contained breathing apparatus (SCBA) may be required, if a large amount of material is spilled under fire conditions. Fight fire from a distance, heat may rupture containers. Vapors may travel a considerable distance and flash back.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Flammable aerosol. Eliminate all ignition sources. Evacuate personnel, ventilate area with fresh air, if a large amount is accidental released, use self-contained breathing apparatus.

Environmental precautions: Dike spill. Prevent material from entering sewers, waterways or low areas. Local authorities should be advised if significant spillages cannot be contained.

Spill Cleanup: Soak up with sand, oil dry or other noncombustible absorbent materials. Place in an approved container for disposal according to local / national regulations. After all visible traces, including vapors, have been removed, thoroughly wet vacuum the area. Caution: Contaminated surfaces may be slippery.

7. HANDLING AND STORAGE

Handling: Use in a well-ventilated area to avoid breathing vapors. Vapors may travel a considerable distance and flash back. Do not spray on an open flame or other ignition source. Use only with adequate ventilation. Use appropriate respiratory protection when ventilation is inadequate. When using do not eat, drink, or smoke. Avoid contact with skin, eyes or clothing Wash thoroughly after handling.

Storage Conditions: Store in a clean, dry place that is well-ventilated. Do not store near sources of heat, flames, in direct sunlight or where temperatures exceed 125°F/52°C. Do not pierce or burn, even after use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:	TWA (ACGIH)	TWA (OSHA)
Naphtha (petroleum), hydrotreated light	Not Established	Not Established
Naphtha (petroleum), hydrotreated heavy	Not Established	Not Established

Respiratory Protection: Avoid breathing vapors, mists or spray Use with sufficient ventilation especially for enclosed or low places. Use NIOSH approved respirators, such as an air-purifying respirator with organic cartridges. In poorly ventilated areas, use an approved self-contained breathing apparatus.

Eye Protection: Avoid eye contact. Use chemical goggles or safety glasses with side shields. Emergency shower and eyewash should be easily accessible to work area.

Skin Protection: Avoid contact with skin. Use chemically resistant gloves and clothing. Wash hands before breaks and at the end of workday.

General Hygiene: Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 156°F/69°C

Percent Volatile by Volume: N.A.

Density: 0.65 g/cc at 77°F/25°C

Vapor Pressure: N/A

Vapor Density (Air=1): N.A.

Solubility in H_2O: N.A.

pH Information: N.A.

Evaporation Rate (CC14=1): N.A.

Form: Aerosol

Appearance: Clear

Color: Straw Yellow

Odor: Mild

10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Vapors may form flammable/explosive mixture with air.

Material and Conditions to Avoid: Avoid all sources of ignition. Do not allow vapor to accumulate in low or confined areas. Do not store with strong oxidizing agents.

Hazardous Decomposition Products: No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Naphtha (petroleum), hydrotreated light

Inhalation: May cause drowsiness and dizziness. Headache. Nausea. Vomiting.
Skin contact: Causes skin irritation.
Eye contact: Direct contact with eyes may cause temporary irritation.
Ingestion: Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Symptoms related to the physical, chemical, and toxicological characteristics: Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea. Vomiting. Skin irritation. May cause redness and pain.
Acute toxicity: May be fatal if swallowed and enters airways.
Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Direct contact with eyes may cause temporary irritation.
Skin Sensitization: Not classified based on available information.
Respiratory Sensitization: Not classified based on available information**.**
Germ cell mutagenicity: Not classified based on available information**.**
Carcinogenicity: Not classified based on available information**.**
Reproductive Toxicity: Not classified based on available information**.**

STOT-single exposure: May cause drowsiness and dizziness.
STOT-repeated exposure: Not classified based on available information**.**
Aspiration hazard: May be fatal if swallowed and enters airways.

Naphtha (petroleum), hydrotreated heavy

Inhalation: No adverse effects due to inhalation are expected.
Skin contact: No adverse effects due to inhalation are expected.
Eye contact: Direct contact with eyes may cause temporary irritation.
Ingestion: Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Symptoms related to the physical, chemical, and toxicological characteristics: Aspiration may cause pulmonary edema and pneumonitis.
Acute Toxicity: May be fatal if swallowed and enters airways.
Skin Corrosion/Irritation: Not classified based on available information.
Serious Eye Irritation/ Eye Irritation: Not classified based on available information.
Skin Sensitization: Not expected to cause skin sensitization.
Respiratory Sensitization: Not a respiratory sensitizer.
Germ Cell Mutagenicity: Not classified based on available information.
Carcinogenicity: Not classified based on available information.
Reproductive toxicity: Not classified based on available information.
STOT-single exposure: Not classified based on available information.
STOT-repeated exposure: Not classified based on available information.
Aspiration toxicity: May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Naphtha (petroleum), hydrotreated light

Ecotoxicity: Is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability: No data is available on the degradability.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other Adverse Effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Naphtha (petroleum), hydrotreated heavy

Ecotoxicity: Is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability: No data is available on the degradability.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other Adverse Effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Comply with federal, state and local regulations. Remove to a permitted waste disposal facility.

14. TRANSPORT INFORMATION

U.S. DOT
Limited Quantity

IATA
Proper Shipping Name: Aerosols, Flammable
Hazard Class: 2.1
Identification No. UN1950
Packing Group: None

IMDG
Proper Shipping Name: Aerosols, Flammable
Hazard Class: 2.1
Identification No. UN1950
Packing Group: None

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA: All ingredients are listed in TSCA inventory.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt.D): Not regulated.
SARA 313 (TRI reporting): Not regulated.

State Regulations (U.S.)

California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

16. OTHER INFORMATION

NPCA-HMIS Ratings:

Health	- 2
Flammability	- 3
Reactivity	- 0

Personal Protective rating to be supplied by user depending on the conditions

FOR INDUSTRIAL USE ONLY

DATE: JUNE 2023

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.