1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Name: MS-475C
D0529A
Acrylic Conformal Coating

Product Use: Conformal Coating

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
Skin corrosion/irritation: Category 2
Serious eye damage/eye irritation: Category 2A.
Skin Sensitization: Category 1
Reproductive toxicity: Category 2
Specific Target Organ Toxicity (single exposure): Category 3
Specific Target Organ Toxicity (repeated exposure): Category 2
Aspiration hazard: Category 1

Label elements:
Signal word
Danger
Pictograms

Hazard Statements
May be fatal if swallowed and entered airways.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.

May cause drowsiness or dizziness.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
Do not handle until all safety precautions have been read and understood.
Pressurized container: Do not pierce or burn, even after use.
Do not breathe mist/vapors/spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear eye protection, protective clothing and protective gloves.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF SKIN irritation occurs: Get medical advice/attention.
IF INHALED: Remove victim to fresh air and keep at rest in a position 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 eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Immediately call POISON CENTER or doctor/physician.
Do NOT induce vomiting.
IF exposed or concerned: Get medical advice/attention.
Call POISON CENTER or doctor/physician if you feel unwell.
Take off contaminated clothing and wash before reuse
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Dispose of contents/ container in accordance with local, regional, national regulations.

Other Hazards
Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing. Misuse of intentional inhalation abuse may lead to death without warning symptoms, due to cardiac effects.

3. INGREDIENTS

Material (s)	CAS No.	Approximate %
1,1,1,2,2,3,4,5,5,5-Decafluoropentane	138495-42-8	40 – 60
Toluene	108-88-3	18 – 25
Methyl ethyl ketone	78-93-3	< 5
Solvent naphtha	64742-95-6	< 1
1,1,1,2-Tetrafluoroethane	811-97-2	18 – 22

4. FIRST AID MEASURES

Inhalation: Remove patient to fresh air. If not breathing, give artificial respiration. Give oxygen as necessary, if qualified person is available. Get medical attention if necessary.

Eye: Flush with a large amount of water for at least 15 minutes, lifting eyelids until no evidence of the chemical remains. Remove contact lenses, if present and easy to do. Continue to rinse. Get medical attention.

Skin: Immediately wash skin with plenty of water (using soap, if available). Wash contaminated clothing before use. Get medical attention if necessary.

Oral: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER/doctor/physician if you feel unwell.

5. FIRE FIGHTING MEASURES

Flammability: This product is not flammable. **Test Method:** Ignition distance test and Enclosed space ignition test

Suitable Extinguishing Media: Alcohol resistant foam, Dry chemical powder, Carbon dioxide (CO2)

Unsuitable extinguishing media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special hazards: The product is not flammable but may burn at hot temperatures. Gas/vapor are heavier than air. May accumulate in confined spaces, particularly at or below ground level. Vapors could form explosive mixtures in air. Containers may rupture when exposed to excessive heat. Hazardous reactions will not occur under normal conditions.

Special Fire Fighting Instruction: Do not enter area without personal protective equipment, including respiratory protection. Exposure to decomposition products may be a hazard to health. Wear self-contained breathing apparatus, if necessary. Use water spray and fog for cooling exposed containers. Do not allow run-off from fire-fighting to enter drains or water sources.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Evacuate personnel to safe area. Ventilate area, especially low or enclosed places where heavy vapors might collect. In case of insufficient ventilation, wear suitable respiratory equipment. Use appropriate personal protection equipment. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure area and call for assistance of trained personnel as soon as conditions permit.

Environmental precautions: Prevent material from entering sewers, waterways, or low areas. Should not be released into the environment.

Methods and materials for containment and clean up: Contain spillage, and then collect with inert material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations

7. HANDLING AND STORAGE

Handling: Avoid breathing vapors or mist. Use only with adequate ventilation. Avoid contact with eyes, skin, or clothing. Do not eat, drink or smoke when handling this product. Wash thoroughly after handling. Do not handle until all safety operating conditions are established and maintained.

Storage Conditions: Storage Conditions: Store in a clean, dry area. Do not store sources of heat, in direct sunlight or where temperatures exceed 120F/49C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:	TLV (ACGIH)	PEL (OSHA)
1,1,1,2,2,3,4,5,5,5-Decafluoropentane	Not Established	Not Established
Toluene	20 ppm TWA	200 ppm 8 Hr. TWA
Methyl Ethyl Ketone	200 ppm TWA	200 ppm TWA
1,1,1,2-Tetrafluoroethane	Not Established	Not Established

Use only with adequate ventilation. Vapors are heavier than air posing a hazard of asphyxia if they are trapped in enclosed or low places.

Eye Protection: Wear safety glasses or coverall chemical splash goggles. An eyewash and safety shower should be nearby.

Respiratory Protection: Where there is potential for airborne exposures above the applicable limits, wear NIOSH approved respiratory protection.

Skin Protection: Where there is potential for skin contact have available and wear as appropriate impervious gloves. Protective gloves and chemical splash goggles should be used when handling liquid.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N.A. (Aerosol)

Density: 1.26 g/cc @ 77°F/25^{O}C

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

pH Information: Neutral

Form: Aerosol

Color: Colorless to light amber

Percent Volatile by Volume: 93

Vapor Pressure: N.A.

Solubility in H_2O: Negligible

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

Appearance: Clear to light amber liquid

Odor: Aromatic odor

10. STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical stability: Stable under normal ambient conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Material and Conditions to Avoid: Direct sunlight. Extremely high and low temperatures. Strong acids and Strong oxidizers.

Decomposition: This product can be decomposed by hot temperatures (flame, glowing metal surfaces, etc.) forming Carbon oxides (CO, CO_2), Hydrogen fluoride, Carbonyl fluoride, Chlorine compounds.

11. TOXICOLOGICAL INFORMATION

Animal Data

1,1,1,2,2,3,4,5,5,5-Decafluoropentane

Information on likely routes of exposure: Inhalation, Skin contact, Ingestion, Eye contact
Acute Toxicity: Not classified based on available information.
Skin Corrosion/Irritation: Not classified based on available information.
Serious Eye Irritaion/ Eye Irritation: Not classified based on available information.
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: Not classified based on available information.
STOT-repeated exposure: Not classified based on available information.
Aspiration toxicity: Not classified based on available information.

Toluene

Oral: LD50: 5,580 mg/kg in male rats
Dermal: LD50: 12,124 mg/kg in rabbits
Inhalation: 4 hour LC50: 25.7 mg/l in male and female rats
Skin corrosion/irritation: Skin irritation – 4 hours in rabbits
Serious eye damage/eye irritation: No eye irritation in rabbits (OECD Test Guideline 405)
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: Genotoxicity in vitro – negative
Reproductive Toxicity: Suspected of damaging the unborn child.
STOT-single exposure: May cause drowsiness or dizziness – Central nervous system.
STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure – Central nervous system.
Aspiration toxicity: Aspiration may cause pulmonary oedema and pneumonitis.

Other ingredients:

Health Effects/Target Organs: Central Nervous System, Cardiac, Ear, Irritant

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:

1,1,1,2,2,3,4,5,5,5-Decafluoropentane (HFC-43-10mee):

Ecotoxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Other adverse effects
Results of PBT and vPvB assessment: This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Toluene

96 hour LC50 in Bluegill: 74 – 340 mg/l
96 hour LC50 in rainbow trout: 5.8 mg/l
7 day NOEC in fathead minnow: 5.44 mg/l
24 hour EC50 in Daphnia magna: 8 mg/l
24 hour EC50 in Fresh water algae: 245 mg/l
24 hour EC50 in green algae: 10 mg/l

13. DISPOSAL CONSIDERATIONS

Comply with Federal, State/Provincial and Local regulations. Remove to a permitted waste disposal facility.

14. TRANSPORT INFORMATION

U.S. DOT
Proper Shipping Name: Consumer Commodity
Hazard Class: ORM-D
Identification No. None
Packing Group: None

IATA
Proper Shipping Name: Aerosols, Non-Flammable
Hazard Class: 2.2
Identification No. UN1950
Packing Group: None

IMDG
Proper Shipping Name: Aerosols, Non-Flammable
Hazard Class: 2.2
Identification No. UN1950
Packing Group: None

15. REGULATORY INFORMATION

U.S. Federal Regulations

TSCA: All ingredients are listed in TSCA inventory.

1,1,1,2,2,3,4,5,5,5-Decafluoropentane (CAS# 138495-42-8) - The United States Environmental Protection Agency has established a Significant New Use Rule (SNUR; 40 CFR 721.5645) for this product. Also, this product requires an export notification under TSCA Section 12(b) and 40 CFR Part 707 Subpart D.

State Regulations (U.S.)

California Proposition 65: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Toluene (CAS 108-88-3) – Developmental Toxin.

16. OTHER INFORMATION

NPCA-HMIS Ratings:

Health	- 2
Flammability	- 1
Reactivity	- 1

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

FOR INDUSTRIAL USE ONLY

REVISION DATE: SEPTEMBER 2019

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.