



miller-stephenson

SDS
Safety Data Sheet

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

Aspiration hazard: Category 1

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

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

Obtain special instructions before use.
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.
Contaminated work clothing should not be allowed out of the workplace.
Wear eye protection, protective clothing and protective gloves.
IF SWALLOWED: Immediately call POISON CENTER or doctor/physician. Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call POISON CENTER or doctor/physician if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
IF exposed or concerned: Get medical advice/attention.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Dispose of contents/ container in accordance with local, regional, national regulations.

3. INGREDIENTS

<u>Material (s)</u>	<u>CAS No.</u>	<u>Approximate %</u>
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) for at least 15 minutes. Wash contaminated clothing before use. Get medical attention if necessary.

Oral: Do NOT induce vomiting. If vomiting occurs, prevent aspiration by keeping the patient's head below the knees. Aspiration may cause pulmonary edema and pneumonitis. Never give anything by mouth to an unconscious person. Call a POISON CENTER/doctor/physician.

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: 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

<u>Exposure Limits:</u>	<u>TLV (ACGIH)</u>	<u>PEL (OSHA)</u>
1,1,1,2,2,3,4,5,5,5-Decafluoropentane	Not Established	Not Established
Toluene	20 ppm TWA	200 ppm TWA
Methyl Ethyl Ketone	200 ppm TWA	200 ppm PEL
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)

Percent Volatile by Volume: 93

Density: 1.26 g/cc @ 77°F/25°C

Vapor Pressure: N.A.

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

Solubility in H₂O: Negligible

pH Information: Neutral

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

Form: Aerosol

Appearance: Clear to light amber liquid

Color: Colorless to light amber

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, Strong bases, Strong oxidizers.

Decomposition: This product can be decomposed by hot temperatures (flame, glowing metal surfaces, etc.) forming Carbon oxides (CO, CO₂), Irritating organic vapors.

11. TOXICOLOGICAL INFORMATION

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 Irritation/ 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

Acute Oral: LD50: > 5,580 mg/kg in male rats
Acute Dermal: LD50: > 5,000 mg/kg in rabbits (ECHA)
Acute Inhalation: 4 hour LC50: 25.7 mg/l (OECD Test Guideline 403)
Skin corrosion/irritation: Skin irritation – 4 hours in rabbits (ECHA)
Serious eye damage/eye irritation: Slight irritation in rabbits (OECD Test Guideline 405)
Respiratory or skin sensitization: Maximisation Test: Negative in Guinea pigs
Germ cell mutagenicity: Genotoxicity in vitro: Negative
Carcinogenicity: Not classified based on available information.
Reproductive Toxicity: Suspected of damaging the unborn child.
STOT-single exposure: May cause drowsiness and dizziness. – Central nervous system.
STOT-repeated exposure: May cause damage to organs through prolonged or repeated exposure. – Central nervous system.
Aspiration hazard: Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

Methyl Ethyl Ketone

Acute Oral: LD50: 670 mg/kg in mice
LD50: 2,300 -3,500 mg/kg in rats
Acute Dermal: LD50: > 8000 mg/kg in rabbit

12. ECOLOGICAL INFORMATION

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

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: 7.63 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

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

U.S. DOT
Limited Quantity

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 as active or are exempt from listing on the TSCA inventory.

1,1,1,2,2,3,4,5,5-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. This product contains one or more substances which requires export notification under TSCA Section 12(b) and 40 CFR Part 707 Subpart D.

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate and Delayed Health.

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR 372). Toluene (CAS# 108-88-3). Methyl ethyl ketone (CAS# 78-93-3).

CERCLA Reportable quantity: Methyl ethyl ketone (CAS# 78-93-3) 5,000 lbs. (2,270 kg)
Toluene (CAS# 108-88-3) 1,000 lbs. (454 kg)

State Regulations (U.S.)

California Proposition 65: This product contains a chemical known to the State of California to cause cancer and/or birth defects or other reproductive harm.

16. OTHER INFORMATION

FOR INDUSTRIAL USE ONLY

REVISION DATE: JULY 2021

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.