1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Name: MS-465C
D0530A
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

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazard classification

Skin corrosion/irritation: Category 2
Reproductive Toxicity: Category 1B
Specific target organ toxicity (repeated exposure): Category 2
Aspiration toxicity: Category 1
Gases under pressure: Compressed gas

Label elements:
Signal Word
Danger

Pictograms

Hazard Statements
Causes skin irritation
May damage fertility or the unborn child
May cause damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways

Contains gas under pressure; may explode if heated

Precautionary Statements
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapors/spray
IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)

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

Store locked up
Protect from sunlight. Store in a well-ventilated place
Dispose of contents/container to an approved waste disposal plant.
10 - 15% of the mixture consists of ingredient(s) of unknown toxicity.
Toxic to aquatic life with long lasting effects
INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS.
Use of alcoholic beverages may enhance toxic effects.

Hazards not otherwise classified (HNOC): Not applicable.

3. INGREDIENTS

Material(s)	CAS No.	Approximate%
1,1,1,2,2,3,4,5,5,5-Decafluoropentane	138495-42-8	60 - 80
1,1,1,2-Tetrafluoroethane	811-97-2	10 - 30
Toluene	108-88-3	10 - 20
Butyl Benzyl Phthalate	85-68-7	1 - 5

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen.

Eye: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin: In case of contact with liquefied gas, thaw frosted parts with lukewarm water.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen.

Oral: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Aspiration hazard if swallowed - can enter lungs and cause damage. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Call a physician or poison control center immediately.

Self-protection of the first aider: Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

Most important symptoms/effects, acute and delayed: Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

Notes to Physician: Treat symptomatically.

General information: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

5. FIRE FIGHTING MEASURES

Fire and Explosion: Some may burn but none ignite readily. Ruptured cylinders may rocket.

Suitable Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire. Water spray, fog or regular foam. Move containers from fire area if you can do it without risk. Damaged cylinders should be handled only by specialists.

Unsuitable extinguishing media: DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.

Uniform Fire Code Aerosols: Level I
Irritant: Liquid

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact Yes.

Sensitivity to Static Discharge No.

Special Fire Fighting Instruction: Move containers from fire area if you can do it without risk. Damaged cylinders should be handled only by specialists.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Stop leak if you can do it without risk. Ventilate the area.

Environmental precautions: Prevent entry into waterways, sewers, basements or confined areas.

Spill Cleanup: If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate. Do not direct water at spill or source of leak.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans.

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Protect from moisture. Keep out of the reach of children. Store away from other materials. Protect from sunlight.

Incompatible materials: Strong acids. Strong oxidizing agents. Strong bases. Chlorinated compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here

Chemical name	OSHA PEL	ACGIH TLV
Toluene 108-88-3	TWA: 200 ppm Ceiling: 300 ppm	TWA: 20 ppm

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits

Engineering Measures: Showers, Eyewash stations, Ventilation systems.

Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Eye/Face Protection: No special protective equipment required.

Skin Protection: Wear protective gloves.

Body Protection: Wear protective clothing. Long sleeved clothing.

General Hygiene: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N.A. (Aerosol)

Percent Volatile by Volume: N.A.

Melting/Freezing Point: N.A.

Flash Point: N.A.

Note: Flammable testing is conducted by ignition distance test and enclosed space ignition test. This product is not flammable.

Density: 1.26 g/ml at 77°F/25°C

Vapor Pressure: N.A.

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

Solubility in H_2O: Negligible

pH Information: Neutral

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

Physical Form: Aerosol

Appearance: Clear

Color: Colorless

Odor: Solvent Odor

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: None under normal processing.

Hazardous Polymerization: Hazardous polymerization does not occur.

Material and Conditions to Avoid: Excessive heat.

Incompatible materials: Strong acids. Strong oxidizing agents. Strong bases. Chlorinated compounds.

Hazardous Decomposition Products: Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation: Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal.

Eye contact: Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). May cause redness, itching, and pain. May cause irritation.

Skin contact: Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components). Repeated exposure may cause skin dryness or cracking.

Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,1,1,2,2,3,4,5,5,5-Decafluoropentane 138495-42-8	> 5 g/kg (Rat)	> 5000 mg/kg (Rabbit)	= 114428 mg/m^3 (Rat) 4 h
Toluene 108-88-3	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
Butyl Benzyl Phthalate 85-68-7	= 2330 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 6.7 mg/L (Rat) 4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms: Erythema (skin redness). May cause redness and tearing of the eyes. Difficulty in breathing. Coughing and/ or wheezing. Asthma-like and/ or skin allergy-like symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization: No information available.

Mutagenic Effects: No information available.

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Toluene 108-88-3		Group 3		
Butyl Benzyl Phthalate 85-68-7		Group 3		

Reproductive toxicity: Contains a known or suspected reproductive toxin. Product is or contains a chemical which is a known or suspected reproductive hazard.

STOT - single exposure: No information available.

STOT - repeated exposure: Causes damage to organs through prolonged or repeated exposure. Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from chronic or repeated exposure. (STOT RE).

Chronic Toxicity: Contains a known or suspected reproductive toxin. Possible risk of irreversible effects. Aspiration may cause pulmonary edema and pneumonitis. Avoid repeated exposure. Prolonged exposure may cause chronic effects. May cause adverse liver effects. Contains toluene. Exposure to toluene in animals via inhalation and intentional overexposure to toluene in humans has caused adverse fetal development effects.

Target organ effects: Respiratory system. Eyes. Skin. Reproductive system. Central nervous system. Kidney. Liver.

Aspiration Hazard: No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral): 13,916.10 mg/kg
ATEmix (inhalation-dust/mist): 73.80 mg/l
ATEmix (inhalation-vapor): 64.90 ATEmix

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1,1,1,2,2,3,4,5,5,5-Decafluoropentane 138495-42-8		96h LC50: = 13 mg/L (Danio rerio)		
Toluene 108-88-3	96h EC50: > 433 mg/L (Pseudokirchneriella subcapitata) 72h EC50: = 12.5 mg/L (Pseudokirchneriella subcapitata)	96h LC50: 15.22 - 19.05 mg/L (Pimephales promelas) 96h LC50: = 12.6 mg/L (Pimephales promelas) 96h LC50: 5.89 - 7.81 mg/L (Oncorhynchus mykiss) 96h LC50: 14.1 - 17.16 mg/L (Oncorhynchus mykiss) 96h LC50: = 5.8 mg/L (Oncorhynchus mykiss) 96h LC50: 11.0 - 15.0 mg/L (Lepomis macrochirus) 96h LC50: = 54 mg/L (Oryzias latipes) 96h LC50: = 28.2 mg/L (Poecilia reticulata) 96h LC50: 50.87 - 70.34 mg/L (Poecilia reticulata)	EC50 = 19.7 mg/L 30 min	48h EC50: 5.46 - 9.83 mg/L (Daphnia magna) 48h EC50: = 11.5 mg/L (Daphnia magna)

Butyl Benzyl Phthalate 85-68-7	96h EC50: 0.02 - 0.25 mg/L (Pseudokirchneriella subcapitata) 72h EC50: 0.2 - 28.2 mg/L (Pseudokirchneriella subcapitata)	96h LC50: 1.0 - 10.0 mg/L (Oncorhynchus mykiss) 96h LC50: = 0.82 mg/L (Oncorhynchus mykiss) 96h LC50: 1.39 - 3.88 mg/L (Pimephales promelas) 96h LC50: > 0.78 mg/L (Pimephales promelas) 96h LC50: 1.0 - 10.0 mg/L (Lepomis macrochirus)		48h EC50: 0.9 - 1.1 mg/L (Daphnia magna) 48h EC50: > 0.76 mg/L (Daphnia magna) 48h EC50: = 1.28 mg/L (Daphnia magna) 48h EC50: = 0.97 mg/L (Daphnia magna)

Persistence and Degradability
No information available.

Bioaccumulation

Chemical name	Partition coefficient
1,1,1,2,2,3,4,5,5,5-Decafluoropentane 138495-42-8	2.7
Toluene 108-88-3	2.73
Butyl Benzyl Phthalate 85-68-7	4.91

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods: This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging: Dispose of in accordance with federal, state and local regulations.

US EPA Waste Number: U069 U220 D001

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene 108-88-3			Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain	

			lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

California Waste Codes: 331

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Toluene 108-88-3	Toxic Ignitable

14. TRANSPORT INFORMATION

U.S. DOT
Limited Quantity

IATA
UN-No. UN1950
Hazard Class: 2.2
ERG Code: 2L
Proper Shipping Name: UN1950, AEROSOLS, NON-FLAMMABLE, 2.2

IMDG/IMO
UN-No. UN1950
Hazard Class: 2.2
EmS-No.: F-D, S-U
Proper Shipping Name: UN1950, AEROSOLS, 2.2

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.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity: This material does not contain any components with a section 302 EHS TPQ.

SARA 313 (TRI Reporting): 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).

SARA 311/312 Hazards: Skin corrosion/irritation: Category 2
Reproductive Toxicity: Category 1B
Specific target organ toxicity (repeated exposure): Category 2
Aspiration toxicity: Category 1
Gases under pressure: Compressed gas

CWA (Clean Water Act): This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3	1000 lb	X	X	X
Butyl Benzyl Phthalate 85-68-7		X	X	

CERCLA: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Toluene 108-88-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Butyl Benzyl Phthalate 85-68-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

State Regulations (U.S.)

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

Chemical name	California Proposition 65
Toluene - 108-88-3	Developmental
Butyl Benzyl Phthalate - 85-68-7	Developmental
Dibutyl Phthalate - 84-74-2	Developmental Female Reproductive Male Reproductive

16. OTHER INFORMATION

NPCA-HMIS Ratings:

Health	2*
Flammability	0
Physical Hazard	3

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

NFPA Ratings:

Health	2
Flammability	0
Instability	0
Physical and Chemical Hazard	N/A

FOR INDUSTRIAL USE ONLY

DATE: MARCH 28, 2025

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.