

# MATERIAL SAFETY DATA SHEET



Date Issued: 10/14/2008  
 MSDS No: C 141-R (Aerosol)\_US  
 Date Revised: 09/21/2009  
 Revision No: 3

## Cybersolv 141-R (Aerosol)

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Cybersolv 141-R (Aerosol)

**GENERAL USE:** Cleaning agent

#### MANUFACTURER

KYZEN CORPORATION  
 430 Harding Industrial Drive  
 Nashville, TN 37211

**Product Stewardship:** 800-845-5524

**Alternate Emergency Phone:** 615-831-0888

#### DISTRIBUTOR

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

**CANUTEC (Canadian Transportation) :**(613) 996 - 6666

**CHEMTREC (US Transportation) :**(800) 424 - 9300

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** Clear liquid/gas.

**IMMEDIATE CONCERNS:** Contents are under pressure; do not puncture or incinerate.

#### POTENTIAL HEALTH EFFECTS

**EYES:** May cause irritation.

**SKIN:** May cause irritation.

**INGESTION:** May be harmful if swallowed.

**INHALATION:** High concentrations in immediate area can displace oxygen and can cause dizziness, unconsciousness, and even death with longer exposure. Keep people away from such vapors without self-contained breathing apparatus.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**EYES:** May cause irritation.

**SKIN:** May cause irritation.

**INGESTION:** May cause irritation.

**INHALATION:** May be mildly irritating to the eyes and skin. Vapor exposure may cause mild discomfort of the nose and throat. Excessive exposure to vapors may cause dizziness, drunkenness, blurred vision, nausea, vomiting or headaches; may be harmful if ingested.

**ACUTE TOXICITY:** Avoid direct contact with eyes, skin and clothing. May be irritating to eyes and skin; may be harmful if inhaled or swallowed.

**CHRONIC EFFECTS:** No data established on product as a whole.

**CARCINOGENICITY:** None expected

**MUTAGENICITY:** None expected

#### REPRODUCTIVE TOXICITY

**REPRODUCTIVE EFFECTS:** None expected

**MEDICAL CONDITIONS AGGRAVATED:** May aggravate disorders of the skin, respiratory or nervous systems.

**ROUTES OF ENTRY:** Eyes, skin, inhalation and ingestion

**CANCER STATEMENT:** None expected

**IRRITANCY:** May cause irritation.

**WARNING CAUTION LABELS:** Avoid contact with skin, eyes and clothing. Avoid breathing mists and vapors. Avoid prolonged and repeated exposure. Use appropriate personal protective equipment. Do not eat, drink or smoke in handling areas.

**COMMENTS HEALTH:** May be irritating to eyes, skin and mucous membranes if inhaled or swallowed.

**HEALTH HAZARDS:** May cause irritation.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Trans-1, 2-dichloroethylene	75 - 100	156-60-5
Pentane, 1,1,1,2,2,3,4,5,5,5-decafluoro	0 - 25	138495-42-8
Carbon Dioxide	0 - 25	124-38-9

**COMMENTS:** This preparation is a proprietary blend of substances; no other component is hazardous as defined by OSHA (29CFR1910.1200) or classified as hazardous by ESIS according to Directive 1999/45/EC and its amendments and Annex 1 of Directive 67/548/EEC.

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

**SKIN:** Wash with soap and water. Get medical attention if irritation develops or persists.

**INGESTION:** Get immediate medical attention. If conscious and medical help is not readily available, give 1 to 2 glasses of water and keep at rest. Never attempt to give anything by mouth to an unconscious person.

**INHALATION:** Move person to fresh air. If necessary, restore and support breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** None to boiling

**FLAMMABLE CLASS:** Non-flammable

**FLAME PROPAGATION OR BURNING RATE OF SOLIDS:** Not established

**GENERAL HAZARD:** None expected

**EXTINGUISHING MEDIA:** Alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

**OTHER CONSIDERATIONS:** This product is self-extinguishing.

**EXPLOSION HAZARDS:** Not established

**FIRE FIGHTING PROCEDURES:** Use water spray to cool containers exposed to fire.

**FIRE FIGHTING EQUIPMENT:** Firefighters should have eye protection and wear self-contained breathing apparatus.

**FIRE EXPLOSION:** None expected

**HAZARDOUS DECOMPOSITION PRODUCTS:** Decomposition vapors will mainly consist of carbon; may contain particles of inorganic oxides and salts.

**COMMENTS:** Contents are under pressure; do not puncture or incinerate.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Clean up spills immediately, observing precautions in Protective Equipment section.

**LARGE SPILL:** Pick up spill on sand, earth or other non-combustible absorbent material. Flush or wipe area with water to remove last traces. Collect wash water/material for disposal. Wear all appropriate personal protective equipment.

#### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Avoid runoff into storm sewers and ditches which lead to waterways.

**LAND SPILL:** Dike area to contain spill. Take precautions necessary to prevent contamination of ground and surface waters. Recover spilled material using an adsorbent like sawdust and sweep into closed containers for disposal. After all visible traces and ignitable vapors

have been removed, thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

**GENERAL PROCEDURES:** Immediately contact emergency personnel and keep unnecessary personnel away. Use suitable protective equipment (Section 8); follow all the fire fighting procedures (Section 5).

**RELEASE NOTES:** See Section 13 for waste disposal.

**SPECIAL PROTECTIVE EQUIPMENT:** See Section 8 for personal protective equipment.

## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Follow practices consistent with the handling and use of industrial chemicals.

**HANDLING:** Avoid contact with skin, eyes and clothing. Avoid breathing mists and vapors. Avoid prolonged and repeated exposure. Use appropriate personal protective equipment. Do not eat, drink or smoke in handling areas.

**STORAGE:** Store in cool, dry, well ventilated areas out of direct sunlight. Keep separate from oxidizers and strong acids. Keep containers tightly closed. Do not reuse empty containers.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Trans-1, 2-dichloroethylene	TWA			200			
Pentane, 1,1,1,2,2,3,4,5,5,5-decafluoro	TWA					200	
	STEL					400	
Carbon Dioxide	TWA	5000	9000	5000	9000		
	STEL			30000	54000		

**ENGINEERING CONTROLS:** Use only in a well ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear appropriate protective eyeglasses or chemical safety goggles as directed by OSHA's eye and face protection regulations in 29CFR1910.133 or European Standard EN166.

**SKIN:** Wash thoroughly after handling.

**RESPIRATORY:** General ventilation and local exhaust are required to minimize or eliminate exposure to mists and vapors. When used in self-contained, well ventilated industrial cleaning devices, personal respiratory protection is not typically required. For extended direct exposure to mist or vapors, use a NIOSH approved organic respirator as described in OSHA 29CFR 1910.134 or European Standard EN149.

**PROTECTIVE CLOTHING:** No special clothing is needed.

**WORK HYGIENIC PRACTICES:** Do not eat, drink or smoke when handling industrial materials.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Aerosol

**ODOR:** Mild

**COLOR:** Colorless

**pH:** Neutral

**PERCENT VOLATILE:** 100

**VAPOR PRESSURE:** Not determined

**VAPOR DENSITY:** Not determined

**BOILING POINT:** 47°C (116°F)

**FLASHPOINT AND METHOD:** None to boiling

**SOLUBILITY IN WATER:** Negligible

**SPECIFIC GRAVITY:** 1.264

**(VOC):** 1175.130 g/L + propellant EPA Method 24

**Notes:** Vapor Pressure of VOC Components: 200-350 mmHg at 20C

**COMMENTS:** These physical properties are typical values based on material tested but may vary from sample to sample. These values should not be construed as guaranteed analysis of any specific lot or as specifications for the product.

## 10. STABILITY AND REACTIVITY

**STABLE:** Yes

**HAZARDOUS POLYMERIZATION:** No

**CONDITIONS TO AVOID:** Heat, sparks, flame or other sources of ignition.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Decomposition vapors will mainly consist of carbon; may contain particles of inorganic oxides and salts.

**INCOMPATIBLE MATERIALS:** Strong acids and oxidizers

## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** May cause irritation.

**SKIN EFFECTS:** May cause irritation.

**CHRONIC:** No data established on product as a whole.

### CARCINOGENICITY

**IARC:** None

**NTP:** None

**OSHA:** None

**REPEATED DOSE EFFECTS:** No data established on product as a whole.

**IRRITATION:** No data established on product as a whole.

**CORROSIVITY:** No data established on product as a whole.

**SENSITIZATION:** None expected

**REPRODUCTIVE EFFECTS:** No data established on product as a whole.

**TERATOGENIC EFFECTS:** No data established on product as a whole.

**MUTAGENICITY:** No data established on product as a whole.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** No data established on product as a whole.

**ECOTOXICOLOGICAL INFORMATION:** No data established on product as a whole.

**BIOACCUMULATION/ACCUMULATION:** No data established on product as a whole.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Use approved treatment transporters and disposal sites.

**EMPTY CONTAINER:** Keep containers tightly closed when not in use; do not reuse empty containers.

**EUROPEAN WASTE CATALOGUE:** Number 01405: Waste organic solvents, refrigerants and foam/aerosol propellants.

## 14. TRANSPORT INFORMATION

### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Aerosol: Non-flammable gas.

**PRIMARY HAZARD CLASS/DIVISION:** 2.2

**UN/NA NUMBER:** UN1950

**PACKING GROUP:** None

**PLACARDS:** Non-flammable gas

**LABEL:** ORM-D

**ROAD AND RAIL (ADR/RID)**

**PROPER SHIPPING NAME:** Aerosol: Non-flammable gas.

**UN NUMBER:** UN1950

**KEMLER NUMBER:** 220/1950

**HAZARD CLASS:** 2.2

**PACKING GROUP:** None

**LABEL:** ORM-D

**AIR (ICAO/IATA)**

**SHIPPING NAME:** Aerosol: Non-flammable gas.

**UN/NA NUMBER:** UN1950

**PRIMARY HAZARD CLASS/DIVISION:** 2.2

**PACKING GROUP:** None

**PLACARDS:** Non-flammable gas

**LABEL:** ORM-D

**COMMENTS:** Harmonized Code: US 3402.90.5030 and MY 3402.90.990 Cleaning Preparations

## 15. REGULATORY INFORMATION

### UNITED STATES

#### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** Acute

**FIRE:** No **PRESSURE GENERATING:** Yes **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** No

**313 REPORTABLE INGREDIENTS:** None

#### 302/304 EMERGENCY PLANNING

**EMERGENCY PLAN:** None

#### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA REGULATORY:** Trans-1,2-dichloroethylene (156-60-5)

**CERCLA RQ:** 1000#

#### CLEAN AIR ACT

**40 CFR PART 68---RISK MANAGEMENT FOR CHEMICAL ACCIDENT RELEASE PREVENTION:** None

#### OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

**29 CFR1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS:** None

**CALIFORNIA PROPOSITION 65:** None

**RCRA STATUS:** None

**OSHA HAZARD COMM. RULE:** None

**CLEAN WATER ACT:** None

**NATIONAL RESPONSE CENTER:** None

**CARCINOGEN:** None

## 16. OTHER INFORMATION

**REASON FOR ISSUE:** New format

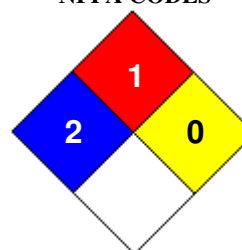
**APPROVED BY:** Kyzen Health & safety

**PREPARED BY:** JAQ

**REVISION SUMMARY:** Revision #: 3. This MSDS replaces the May 18, 2009 MSDS. Any changes in information are as follows: In Section 1: MSDS Number

**HMIS RATING**

<b>HEALTH:</b>	<b>2</b>
<b>FLAMMABILITY:</b>	<b>1</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	

**NFPA CODES**

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