

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 01/11/2008

Reviewed on 01/11/2008

## 1 Identification of substance

- **Product details**

- **Trade name:** CM 2000 - Part A

- **Article number:** 83-202544A

- **Application of the substance / the preparation**

- **Manufacturer/Supplier:**

DSSCC

4226 Kansas Avenue

Kansas City, KS 66106

Tel.: (866) 329-8724

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call (703) 527-3887. Collect calls are accepted.

- **Information department:** Environmental, Health, and Safety department.

## 2 Composition/Data on components

- **Chemical characterization**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	25-50%
101-68-8	4,4'-methylenediphenyl diisocyanate	25-50%
95-63-6	1,2,4-trimethylbenzene	≤ 10%
98-82-8	cumene	≤ 1%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 3 Hazards identification

- **Hazard description:** May cause eye and skin irritation. Prolonged contact may cause sensitization.

- **Information pertaining to particular dangers for man and environment:**

The product has to be labelled due to internationally acknowledged calculation procedures using the latest valid versions.

- **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 1

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**

HEALTH	2
FIRE	1
PHYSICAL HAZARD	0

Health = \*2

Fire = 1

Reactivity = 0

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## 4 First aid measures

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:** Seek medical treatment.

## 5 Fire fighting measures

- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

- **For safety reasons unsuitable extinguishing agents:** Water

- **Protective equipment:**

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

Mouth respiratory protective device.

## 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

- **Measures for environmental protection:** Inform respective authorities in case of seepage into water course or sewage system.

- **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

## 7 Handling and storage

- **Handling:**

- **Information for safe handling:**

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** No special requirements.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:** Keep receptacle tightly sealed.

## 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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· **Components with limit values that require monitoring at the workplace:**

**9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

TLV (as inhalable aerosols)

**101-68-8 4,4'-methylenediphenyl diisocyanate**

PEL Short-term value: C 0.2 mg/m<sup>3</sup>, C 0.02 ppm

REL Short-term value: C 0.2\* mg/m<sup>3</sup>, C 0.02\* ppm

Long-term value: 0.05 mg/m<sup>3</sup>, 0.005 ppm  
\*10-min

TLV 0.051 mg/m<sup>3</sup>, 0.005 ppm

**95-63-6 1,2,4-trimethylbenzene**

REL 125 mg/m<sup>3</sup>, 25 ppm

TLV 123 mg/m<sup>3</sup>, 25 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Suitable respiratory protective device recommended.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Wear appropriate eye protection to prevent eye contact.

## 9 Physical and chemical properties

· **General Information**

<b>Form:</b>	Liquid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic

· **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 149°C (300°F)

· **Flash point:** > 93°C (> 199°F)

· **Ignition temperature:** 400.0°C (752°F)

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· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	0.4 Vol %
<b>Upper:</b>	7.5 Vol %
· <b>Vapor pressure at 20°C (68°F):</b>	5.0 hPa (4 mm Hg)
· <b>Density at 20°C (68°F):</b>	1.130 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	11.1 %
· <b>Solids content:</b>	69.9 %
· <b>Volatile Organic Compounds:</b>	Not determined

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

## 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

### 101-68-8 4,4'-methylenediphenyl diisocyanate

Oral	LD50	2200 mg/kg (mouse)
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### 64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
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Dermal	LD50	>3400 mg/kg (rab)
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Inhalative	LC50/4 h	>10.2 mg/l (rat)
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### 95-63-6 1,2,4-trimethylbenzene

Oral	LD50	5000 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** May cause skin irritation.
- **on the eye:** Irritating effect.

- **Sensitization:**

Sensitization possible through inhalation.

Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

Carcinogenic.

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## 12 Ecological information

- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **General notes:**  
 Water hazard class 2 (Self-assessment): hazardous for water  
 Do not allow product to reach ground water, water course or sewage system.  
 Danger to drinking water if even small quantities leak into the ground.  
 Harmful to aquatic organisms

## 13 Disposal considerations

- **Product:**
- **Recommendation:**  
 Must not be disposed of as normal garbage. Do not allow product to reach sewage system.  
 It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to Federal, State, and Local regulations.

## 14 Transport information

- |   |   |
|---|---|
| · <b>DOT regulations:</b>   | Not Regulated   |
| · <b>Hazard class:</b>  | N/A   |
| · <b>Remarks:</b>   | Add "Marine Pollutant" to end of proper shipping name if shipping in a bulk container (>119 gallons). |
| · <b>Limited Quantity Exemption:</b>  | No Limited Quantity exemption applies for this shipping class.  |
| · <b>U.S. Domestic Ground Shipments:</b>  | Same as listed for Standard Shipments above.  |
| · <b>U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:</b> | Same as listed for Standard Shipments above.  |
| · <b>Emergency Response Guide (ERG) Number:</b>                                   | Not determine   |
| · <b>Land transport ADR/RID (cross-border):</b>                                   |   |
| · <b>ADR/RID class:</b>   | N/A   |
| · <b>Maritime transport IMDG:</b>   |   |
| · <b>IMDG Class:</b>  | -   |
| · <b>Marine pollutant:</b>  | Yes   |
| · <b>Air transport ICAO-TI and IATA-DGR:</b>                                      |   |
| · <b>ICAO/IATA Class:</b>   | -   |

## 15 Regulations

- **Sara**
- **Section 355 (extremely hazardous substances):**  
 None of the ingredient is listed.
- **Section 313 (Specific toxic chemical listings):**  
 This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.

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9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	25-50%
101-68-8	4,4'-methylenediphenyl diisocyanate	25-50%
95-63-6	1,2,4-trimethylbenzene	≤10%
1330-20-7	xylene	≤1%
98-82-8	cumene	≤1%
100-41-4	ethylbenzene	≤1%

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to the State of California (Prop. 65) to cause cancer:**

64742-95-6 Solvent naphtha (petroleum), light arom.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	D; CBD
101-68-8	4,4'-methylenediphenyl diisocyanate	CBD; D
1330-20-7	xylene	D
98-82-8	cumene	D; CBD
100-41-4	ethylbenzene	D

· **IARC (International Agency for Research on Cancer)**

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	3
101-68-8	4,4'-methylenediphenyl diisocyanate	3
1330-20-7	xylene	3
100-41-4	ethylbenzene	2B

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

1330-20-7	xylene	A4
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· **MAK (German Maximum Workplace Concentration)**

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	3
101-68-8	4,4'-methylenediphenyl diisocyanate	3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols: T Toxic**

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· **Hazard-determining components of labelling:**

diphenylmethanediisocyanate, isomeres and homologues  
 4,4'-methylenediphenyl diisocyanate  
 Solvent naphtha (petroleum), light arom.

· **Risk phrases:**

45 May cause cancer.  
 20 Harmful by inhalation.  
 36/37/38 Irritating to eyes, respiratory system and skin.  
 42/43 May cause sensitisation by inhalation and skin contact.  
 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 65 Harmful: may cause lung damage if swallowed.

· **Safety phrases:**

53 Avoid exposure - obtain special instructions before use.  
 2 Keep out of the reach of children.  
 9 Keep container in a well-ventilated place.  
 13 Keep away from food, drink and animal feeding stuffs.  
 16 Keep away from sources of ignition - No smoking.  
 20 When using do not eat or drink.  
 23 Do not breathe fumes/aerosol.  
 24/25 Avoid contact with skin and eyes.  
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 28 After contact with skin, wash immediately with plenty of soap and water.  
 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.  
 33 Take precautionary measures against static discharges.  
 37/39 Wear suitable gloves and eye/face protection.  
 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.  
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
 63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

· **Special labeling of certain preparations:** Contains isocyanates. See information supplied by the manufacturer.

· **National regulations:**

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

## 16 Other information

*The provided information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

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· **Department issuing MSDS:** Environmental, Health & Safety Department

· **Contact:** Environmental, Health & Safety Manager