



Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

1 Identification

- **Product identifier**
- **Trade name:** Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum
- **Article number:** T-009
- **Application of the substance / the mixture** Diagnosis of contact allergy
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Chemotechnique MB Diagnostics AB
Modemgatan 9
235 39 VELLINGE
SWEDEN
- **Information department:** Product safety department.
- **Emergency telephone number:**
8.00 to 16.00 (CET): +46 (0)40 466 077
Local emergency services during non-office hours

2 Hazard(s) identification

- **Classification of the substance or mixture**
Sensitization - Respiratory 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Sensitization - Skin 1 H317 May cause an allergic skin reaction.
Carcinogenicity 1B H350 May cause cancer.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
4-methyl-m-phenylene diisocyanate

(Contd. on page 2)



Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 1)

· **Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause cancer.

· **Precautionary statements**

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
[In case of inadequate ventilation] wear respiratory protection.
If on skin: Wash with plenty of water.
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
If skin irritation or rash occurs: Get medical advice/attention.
If experiencing respiratory symptoms: Call a poison center/doctor.
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = *0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

US

(Contd. on page 3)



Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 2)

3 Composition/information on ingredients

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

- **Dangerous components:**

584-84-9	4-methyl-m-phenylene diisocyanate	2.0%
----------	-----------------------------------	------

- **Non-hazardous ingredients**

8009-03-8	Petrolatum	98.0%
-----------	------------	-------

4 First-aid measures

- **Description of first aid measures**
- **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.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

US

(Contd. on page 4)



Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 3)

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

584-84-9	4-methyl-m-phenylene diisocyanate	0.020 ppm
----------	-----------------------------------	-----------

· **PAC-2:**

584-84-9	4-methyl-m-phenylene diisocyanate	0.083 ppm
----------	-----------------------------------	-----------

· **PAC-3:**

584-84-9	4-methyl-m-phenylene diisocyanate	0.51 ppm
----------	-----------------------------------	----------

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
FOR EXTERNAL/TOPICAL USE ONLY.
- **Information about protection against explosions and fires:**
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store at temperatures between 2 °C and 8 °C
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.

(Contd. on page 5)



Safety Data Sheet
acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 4)

Protect from sunlight.

- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

- **Control parameters**

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

584-84-9 4-methyl-m-phenylene diisocyanate

PEL	Ceiling limit value: 0.14 mg/m ³ , 0.02 ppm
REL	See Pocket Guide App. A
TLV	Short-term value: 0.005* ppm Long-term value: 0.001* ppm *inh.fraction+vapour; Skin;DSEN,RSEN; BEI, A3

- **Ingredients with biological limit values:**

584-84-9 4-methyl-m-phenylene diisocyanate

BEI	5 µg/g creatinine Medium: urine Time: end of shift Parameter: Toluene diamine, sum of 2.4- and 2.6- isomers with hydrolysis (Ns)
-----	-------------------------------------------------------------------------------------------------------------------------------------------

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

- **Exposure controls**

- **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.

- **Breathing equipment:**

- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Contd. on page 6)



Safety Data Sheet
acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 5)

· **Protection of hands:**



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **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:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Solidified mass

Color: Whitish

· **Odor:** undistinguishable

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: 51.6–57.2 °C (124.9–135 °F)

(Contd. on page 7)



Safety Data Sheet
acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 6)

Boiling point/Boiling range:	359–732 °C (678.2–1,349.6 °F)
· Flash point:	259–277 °C (498.2–530.6 °F)
· Flammability:	Not determined.
· Auto igniting:	>290 °C (>554 °F)
· Decomposition temperature:	Not determined.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	<0.013 hPa (<0 mm Hg)
· Density at 20 °C (68 °F):	0.877 g/cm ³ (7.31857 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Insoluble.
· Partition coefficient (n-octanol/water):	0.77815
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
VOC content:	0.00 %
Solids content:	100.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

(Contd. on page 8)



Safety Data Sheet
acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 7)

- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

ATE (Acute Toxicity Estimate)

Inhalative	LC50/4 h	25 mg/l
------------	----------	---------

584-84-9 4-methyl-m-phenylene diisocyanate

Oral	LD50	5,800 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No 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 categories**

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

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

584-84-9	4-methyl-m-phenylene diisocyanate	R
----------	-----------------------------------	---

(Contd. on page 9)



Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 8)

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

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, IMDG, IATA** not regulated

(Contd. on page 10)



Safety Data Sheet
acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 9)

· UN proper shipping name	
· DOT, IMDG, IATA	not regulated
· Transport hazard class(es)	
· DOT, ADN, IMDG, IATA	
· Class	not regulated
· Packing group	
· DOT, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

584-84-9	4-methyl-m-phenylene diisocyanate
----------	-----------------------------------

· **Section 313 (Specific toxic chemical listings):**

584-84-9	4-methyl-m-phenylene diisocyanate
----------	-----------------------------------

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

584-84-9	4-methyl-m-phenylene diisocyanate	ACTIVE
----------	-----------------------------------	--------

· **Hazardous Air Pollutants**

584-84-9	4-methyl-m-phenylene diisocyanate
----------	-----------------------------------

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

(Contd. on page 11)



Safety Data Sheet
acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 10)

· **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.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

584-84-9	4-methyl-m-phenylene diisocyanate	(A4)
----------	-----------------------------------	------

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

584-84-9	4-methyl-m-phenylene diisocyanate
----------	-----------------------------------

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS08

· **Signal word** Danger

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

4-methyl-m-phenylene diisocyanate

· **Hazard statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause cancer.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

[In case of inadequate ventilation] wear respiratory protection.

(Contd. on page 12)



Safety Data Sheet

acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 11)

If on skin: Wash with plenty of water.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This 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.

· **Department issuing SDS:** Product safety department.

· **Contact:** -

· **Date of preparation / last revision** 05/09/2025 / 4.0

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

(Contd. on page 13)



Safety Data Sheet
acc. to OSHA HCS

Printing date 10/29/2025

Reviewed on 05/09/2025

Trade name: Toluene-2,4-diisocyanate (TDI) 2.0% in petrolatum

(Contd. of page 12)

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Sensitization - Respiratory 1: Respiratory sensitisation – Category 1

Sensitization - Skin 1: Skin sensitisation – Category 1

Carcinogenicity 1B: Carcinogenicity – Category 1B

· * **Data compared to the previous version altered.**

US