

# SAFETY DATA SHEET

FOR INDUSTRIAL USE ONLY

ELEMENT14\* PDMS 100

(In accordance with Article 41, Paragraph 1, of Industrial Safety and Health Act)

## Section 1. Chemical product and company identification

- A. **Product name** : Element14\* PDMS 100-E  
**MSDS Number** : 000000054937
- B. **Material uses** : Not available
- C. **Company/undertaking identification**
- Manufacturer/Importer/Distributor Information** : Momentive Performance Materials Korea Co., Ltd.  
8FL, Daeryung Post Tower 6-Cha, 298, Beotkkot-ro,  
Geumcheon-gu, Seoul 153-715 Korea
- Contact person** : commercial.services@momentive.com
- Telephone** : +82-2-6201-4600  
**Telefax** : +82-2-6201-4601
- Emergency telephone number** : +65-3158-1074 / +82-2-6201-4600
- Responsible Department** : Product Stewardship & Compliance

## Section 2. Hazards identification

- A. **Hazard classification** : Not classified.
- B. **GHS label elements, including precautionary statements**
- Signal word** : No signal word.  
**Hazard statements** : No known significant effects or critical hazards.

### Precautionary statements

- General** : Not applicable.
- Prevention** : Not applicable.
- Response** : Not applicable.
- Storage** : Not applicable.
- Disposal** : Not applicable.

- C. **Other hazards which do not result in classification** : None known.

### Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture  
**Chemical name** : Not available

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

- A. **Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- B. **Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- C. **Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- D. **Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- E. **Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first aid personnel** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

### Section 5. Fire-fighting measures

- A. **Extinguishing media**
- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray (fog).  
**Unsuitable extinguishing media** : water jet
- B. **Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

- C. Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Remark** : Not available

## Section 6. Accidental release measures

- A. Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- B. Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- C. Methods and material for containment and cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13 of SDS). Dispose of via a licensed waste disposal contractor. Note: see section 1 of SDS for emergency contact information and section 13 of SDS for waste disposal.

## Section 7. Handling and storage

- A. Precautions for safe handling**
- Protective measures** : Put on appropriate personal protective equipment (see section 8 of SDS).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
- B. Conditions for safe storage,** : Store in accordance with local regulations. Store in original

**including any incompatibilities**

container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### A. Control parameters

#### Occupational exposure limits

None.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**B. Appropriate engineering controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### C. Personal protective equipment

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 9. Physical and chemical properties

### A. Appearance

**Physical state** : Liquid

	<b>Color</b>	:	colorless.
<b>B.</b>	<b>Odor</b>	:	Odorless/Odourless
<b>C.</b>	<b>Odor threshold</b>	:	Not available
<b>D.</b>	<b>pH</b>	:	Not available
<b>E.</b>	<b>Melting/freezing point</b>	:	Not available
<b>F.</b>	<b>Boiling point/boiling range</b>	:	Not available
<b>G.</b>	<b>Flash point</b>	:	Greater than 300 °C
	<b>Burning time</b>	:	Not available
	<b>Burning rate</b>	:	Not available
<b>H.</b>	<b>Evaporation rate</b>	:	Not available
<b>I.</b>	<b>Flammability (solid, gas)</b>	:	Not available
<b>J.</b>	<b>Lower and upper explosive (flammable) limits</b>	:	<b>Lower:</b> Not available <b>Upper:</b> Not applicable.
<b>K.</b>	<b>Vapor pressure</b>	:	0.133 hPa @ 20 °C
<b>L.</b>	<b>Solubility</b>	:	Soluble in toluene
	<b>Solubility in water</b>	:	Insoluble
<b>M.</b>	<b>Vapor density</b>	:	1.0 [Air = 1]
<b>N.</b>	<b>Relative density</b>	:	Not available
<b>O.</b>	<b>Partition coefficient: n-octanol/water</b>	:	Not available
<b>P.</b>	<b>Auto-ignition temperature</b>	:	Not available
<b>Q.</b>	<b>Decomposition temperature</b>	:	Not available
	<b>SADT</b>	:	Not available
<b>R.</b>	<b>Viscosity</b>	:	<b>Dynamic:</b> Not available <b>Kinematic:</b> Not available
<b>S.</b>	<b>Molecular weight</b>	:	Not available
<b>T.</b>	<b>Density</b>	:	0.96 g/cm <sup>3</sup>

**Other information**

No additional information.

**Section 10. Stability and reactivity**

<b>A.</b>	<b>Chemical stability</b>	:	The product is stable.
	<b>Possibility of hazardous reactions</b>	:	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>B.</b>	<b>Conditions to avoid</b>	:	No specific data.
<b>C.</b>	<b>Incompatible materials</b>	:	No specific data.
<b>D.</b>	<b>Hazardous decomposition products</b>	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Section 11. Toxicological information**

<b>A.</b>	<b>Information on the likely routes of exposure</b>	:	Not available
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**Potential acute health effects**

**Inhalation** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Eye contact** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Inhalation** : No specific data.  
**Ingestion** : No specific data.  
**Skin contact** : No specific data.  
**Eye contact** : No specific data.

### B. Health hazards

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Element14* PDMS 100-E				
	LD50 Oral	Rat	5,000 mg/kg	-
	LD50 Oral	Rat	4,800 mg/kg	-
	LC50 Inhalation	Rat	> 535 mg/l	1 h
	LD50 Dermal	Rabbit	> 10,000 mg/kg	-
	LD50 Dermal	Rabbit	> 2,000 mg/kg	-

**Conclusion/Summary** : Not available

#### Irritation/Corrosion

##### **Conclusion/Summary**

**Skin** : Not available  
**eyes** : Not available  
**Respiratory** : Not available

#### Sensitization

Product/ingredient name	Route of exposure	Species	Result
Element14* PDMS 100-E	Magnusson-Kligmann	Guinea pig	In tests with guinea-pigs, the product did not show a sensitising effect (OECD 406; GPMT according to Magnusson-Kligman).

##### **Conclusion/Summary**

**Skin** : Not available  
**Respiratory** : Not available

#### Mutagenicity

**Conclusion/Summary** : Not available

#### Carcinogenicity

**Conclusion/Summary** : Not available

#### Reproductive toxicity

**Conclusion/Summary** : Not available

**Teratogenicity**

**Conclusion/Summary** : Not available

**Specific target organ toxicity (single exposure)**

Not available

**Specific target organ toxicity (repeated exposure)**

Not available

**Aspiration hazard**

Not available

**Potential chronic health effects****Chronic toxicity**

**Conclusion/Summary** : Not available

**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

**Other information** : Not available

**ATE value**

Not available

<b>Section 12. Ecological information</b>
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**A. Ecotoxicity**

**Conclusion/Summary** : Not available

**B. Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
element14pdms100e	other methods	- 70 d		

**Conclusion/Summary** : Not available

**D. Mobility in soil**

**Soil/water partition coefficient (KOC)** : Not available

**E. Other adverse effects** : No known significant effects or critical hazards.

<b>Section 13. Disposal considerations</b>
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- A. Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
- B. Disposal precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

\*PG : Packing group

- Special precautions for user** : This product is not regarded as dangerous goods according to the national and international regulations on the transport of dangerous goods.  
Keep away from foodstuffs and animal feed.

## Section 15. Regulatory information

### A. Regulation according to ISHA

- ISHA Article 37** : None required.  
**ISHA Article 38** : None required.

### B. Regulation according to TCCA

- TCCA Toxic chemicals** : Not applicable  
**TCCA Observational chemicals** : None required.  
**TCCA Article 32 (Banned)** : None required.  
**TCCA Article 32 (Restricted)** : None required.  
**TCCA Article 17 (TRI)** : None required.  
**Korea inventory** : This material is listed or exempted.

- C. Dangerous Materials Safety Management Act** : Not regulated.

- D. Wastes regulation** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

### E. Regulation according to other foreign laws

- International lists** : Australia inventory (AICS) This material is listed or exempted.  
Canada inventory This material is listed or exempted.  
Japan inventory This material is listed or exempted.  
China inventory (IECSC) This material is listed or exempted.



New Zealand Inventory (NZIoC) This material is listed or exempted.  
 Philippines inventory (PICCS) This material is listed or exempted.  
 United States inventory (TSCA 8b) This material is listed or exempted.  
 Taiwan inventory (CSNN) This material is listed or exempted.

## Section 16. Other information

- A. References** : Not available
- B. Date of issue/Date of revision** : 2015/04/30
- C. Version** : 1.0
- Date of printing** : 2016/05/04
- D. Other**
- Key to abbreviations** :
- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
  - ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
  - ATE = Acute Toxicity Estimate
  - BCF = Bioconcentration Factor
  - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
  - IATA = International Air Transport Association
  - IBC = Intermediate Bulk Container
  - IMDG = International Maritime Dangerous Goods
  - LogPow = logarithm of the octanol/water partition coefficient
  - MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
  - RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
  - UN = United Nations

### Notice to reader

Unless otherwise specified in section 1, Momentive Products are intended for industrial application only. They are not intended for specific medical applications, neither for long-lasting (> 30 days) implantation into the human body, injected or directly ingested, nor for the manufacture of multiple usable contraceptives

### Further Information

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.

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