

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name or designation of the mixture	ReflectSleeve 1450E
Registration number	-
Synonyms	None.
Issue date	30-September-2013
Version number	01
Revision date	-
Supersedes date	-

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Identified uses	Fiberglass Sleeve with Aluminized Film.
Uses advised against	None known.

**1.3. Details of the supplier of the safety data sheet**

Supplier	
Company name	Federal-Mogul Corporation, Manchester International Office Centre
Address:	Styal Road, Manchester M22 5TN England
Telephone:	+44 (0) 161 955 5200
Fax:	+44 (0) 161 955 5204
Emergency telephone:	24hr EP (INFOTRAC): 1-800-535-5053 International: (001) 352-323-3500

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

**Classification according to Directive 67/548/EEC or 1999/45/EC as amended**

This preparation does not meet the criteria for classification according to Directive 1999/45/EC as amended.

**Classification according to Regulation (EC) No 1272/2008 as amended**

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

**Hazard summary**

Physical hazards	Not classified for physical hazards.
Health hazards	Not classified for health hazards.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Under normal conditions of processing and use, exposure to the chemical constituents in this product is unlikely. Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.
Main symptoms	Not relevant, due to the form of the product.

**2.2. Label elements****Label according to Regulation (EC) No. 1272/2008 as amended**

Hazard pictograms	None.
Signal word	None.
Hazard statements	The mixture does not meet the criteria for classification.

**Precautionary statements**

Prevention	Observe good industrial hygiene practices.
Response	No specific first aid measures noted.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.

**Supplemental label information** Not applicable.

**2.3. Other hazards** Not a PBT or vPvB substance or mixture.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Fiberglass	88 - 92	65997-17-3 266-046-0	-	650-016-00-2	
<b>Classification:</b>	<b>DSD:</b> -				
	<b>CLP:</b> -				
Aluminized pressure-sensitive film	8 - 12	Proprietary -	-	-	
<b>Classification:</b>	<b>DSD:</b> -				
	<b>CLP:</b> -				

**Composition comments** This product does not generate dust when used as intended.  
ReflectSleeve 1450E is a woven, one-piece fiberglass sleeve material that is adhesively bonded with an aluminized heat-seal film.

## SECTION 4: First aid measures

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 4.1. Description of first aid measures

**Inhalation** No specific first aid measures noted.  
**Skin contact** No adverse effects due to skin contact.  
**Eye contact** No specific first aid measures noted. However, immediately flush with plenty of water for at least 15 minutes.  
**Ingestion** No adverse effects due to ingestion are expected.

**4.2. Most important symptoms and effects, both acute and delayed** Not relevant, due to the form of the product.

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

## SECTION 5: Firefighting measures

**General fire hazards** This product is not flammable.

### 5.1. Extinguishing media

**Suitable extinguishing media** Use fire-extinguishing media appropriate for surrounding materials.  
**Unsuitable extinguishing media** None.

**5.2. Special hazards arising from the substance or mixture** By heating and fire, toxic vapours/gases may be formed.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  
**Special fire fighting procedures** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.  
**For emergency responders** Use personal protection recommended in section 8 of the SDS.

**6.2. Environmental precautions** No special environmental precautions required

**6.3. Methods and material for containment and cleaning up** No specific precautions.

**6.4. Reference to other sections** For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Normal handling and use of this product should not generate dust or fumes. The intended use of this product does not include its milling, grinding or saw cutting. Observe good industrial hygiene practices.
- 7.2. Conditions for safe storage, including any incompatibilities** Store in closed original container in a dry place.
- 7.3. Specific end use(s)** Fiberglass Sleeve with Aluminized Film.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Fiberglass (CAS 65997-17-3)	TWA	1 fibers/mL	Fiber.
		5 mg/m3	Fiber.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no-effect level (DNEL)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

### 8.2. Exposure controls

**Appropriate engineering controls** Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.

#### Individual protection measures, such as personal protective equipment

**General information** Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** No special precautions.

##### Skin protection

- **Hand protection** No protection is ordinarily required under normal conditions of use.

- **Other** No skin protection is ordinarily required under normal conditions of use.

**Respiratory protection** No protection is ordinarily required under normal conditions of use and with adequate ventilation.

**Thermal hazards** Not applicable.

**Hygiene measures** Wash hands after handling.

**Environmental exposure controls** No special environmental precautions required

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Appearance** Aluminum color.

**Physical state** Solid.

**Form** Solid.

**Colour** Aluminum color.

**Odour** Odourless.

**Odour threshold** Not applicable.

**pH** Not applicable.

**Melting point/freezing point** > 260 °C (> 500 °F)

**Initial boiling point and boiling range** Not applicable.

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not applicable.

**Flammability limit - upper (%)** Not applicable.

**Vapour pressure** Not applicable.

**Vapour density** Not applicable.

**Relative density** 2.2

**Solubility(ies)** Insoluble in water.

**Auto-ignition temperature** > 250 °C (> 482 °F)

**Decomposition temperature** Not available.

**Viscosity** Not applicable.

**Explosive properties** Not available.

**Oxidizing properties** Not available.

**9.2. Other information** No relevant additional information available.

**SECTION 10: Stability and reactivity**

**10.1. Reactivity** Stable at normal conditions.

**10.2. Chemical stability** Material is stable under normal conditions.

**10.3. Possibility of hazardous reactions** Will not occur.

**10.4. Conditions to avoid** No special precautions.

**10.5. Incompatible materials** None known.

**10.6. Hazardous decomposition products** Thermal decomposition of this product can generate carbon monoxide, carbon dioxide and nitrogen oxides.

**SECTION 11: Toxicological information**

**General information** Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.

**Information on likely routes of exposure**

**Ingestion** Not relevant, due to the form of the product.

**Inhalation** No adverse effects due to inhalation are expected.

**Skin contact** No adverse effects due to skin contact are expected.

**Eye contact** No adverse effects due to eye contact are expected.

**Symptoms** Not relevant, due to the form of the product.

**11.1. Information on toxicological effects**

**Acute toxicity** Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.

**Skin corrosion/irritation** No adverse effects due to skin contact are expected.

**Serious eye damage/eye irritation** No adverse effects due to eye contact are expected.

**Respiratory sensitisation** Not relevant, due to the form of the product.

**Skin sensitisation** Not a skin sensitiser.

**Germ cell mutagenicity** Not relevant, due to the form of the product.

**Carcinogenicity** Not relevant, due to the form of the product.

**Reproductive toxicity** Not relevant, due to the form of the product.

**Specific target organ toxicity - single exposure** Not relevant, due to the form of the product.

**Specific target organ toxicity - repeated exposure** Not relevant, due to the form of the product.

**Aspiration hazard** Not relevant, due to the form of the product.

**Mixture versus substance information** Not available.

**Other information** Not relevant, due to the form of the product.

## SECTION 12: Ecological information

<b>12.1. Toxicity</b>	Not relevant, due to the form of the product in its manufactured and shipped state.
<b>12.2. Persistence and degradability</b>	Not relevant.
<b>12.3. Bioaccumulative potential</b>	Not relevant.
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not applicable.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	Not relevant, due to the form of the product.
<b>Mobility in general</b>	Not relevant, due to the form of the product.
<b>12.5. Results of PBT and vPvB assessment</b>	Not relevant, due to the form of the product.
<b>12.6. Other adverse effects</b>	Not relevant.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Contaminated packaging</b>	Since emptied containers retain product residue, follow label warnings even after container is emptied.
<b>EU waste code</b>	16 03 04
<b>Disposal methods/information</b>	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

## SECTION 14: Transport information

### ADR

Not regulated as dangerous goods.

### RID

Not regulated as dangerous goods.

### ADN

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

Not listed.

#### Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended

Not listed.

#### Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

#### Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not listed.

Directive 94/33/EC on the protection of young people at work

Not listed.

#### Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives.

#### National regulations

Follow national regulation for work with chemical agents.

#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

### SECTION 16: Other information

#### List of abbreviations

DNEL: Derived No-Effect Level.  
PNEC: Predicted No-Effect Concentration.  
CLP: Regulation No. 1272/2008.  
DSD: Directive 67/548/EEC.

#### References

Registry of Toxic Effects of Chemical Substances (RTECS)  
HSDB® - Hazardous Substances Data Bank

#### Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. For details, refer to Sections 9, 11 and 12.

#### Full text of any statements or R-phrases and H-statements under Sections 2 to 15

None.

#### Training information

Follow training instructions when handling this material.

#### Disclaimer

The information provided on this data sheet was abstracted from supplier safety data sheets and standard references in occupational health and toxicology. Federal-Mogul makes no representation or warranty with respect to the information obtained from such references. The information is however, as of the date provided, true and accurate to the best of Federal-Mogul's knowledge, and should be used to make an independent determination of the methods to safeguard workers and the environment.