SAFETY DATA SHEET

Heegermaterials

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Name of the substance	Thorium Fluoride
Identification number	237-259-6 (EC number)
Registration number	-
Synonyms	Thorium tetrafluoride
Issue date	22-May-2015
Version number	07
Revision date	26-March-2021

1.3. Details of the supplier of the safety data sheet

Supplier

Company name	Heeger Materials Inc.
Address	230 Steele St Denver CO 80206 United States
Telephone	414.212.0257
e-mail	advancedmaterials@materion.com
Contact person	Laura Hamilton

1.4. Emergency telephone number

Supersedes date 07-May-2019

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

Identified uses	Not available.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name	Materion Advanced Chemicals Inc.
Address	407 N. 13th Street 1316 W. St. Paul Avenue Milwaukee, WI 53233 United States
Division	Milwaukee
Telephone	414.212.0257
e-mail	advancedmaterials@materion.com
Contact person	Laura Hamilton

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard summary WARNING

Causes skin irritation. Causes serious eye irritation. May cause irritation to the respiratory system. Possible reproductive hazard. May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

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

Contains: Thorium Fluoride

Hazard pictograms

Signal word Warning

Hazard statements

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H361	Suspected of damaging fertility or the unborn child.

Precautionary statements

Prevention

	Observe good industrial hygiene practices.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P263	Avoid contact during pregnancy/while nursing.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

Response

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P308 + P313	IF exposed or concerned: Get medical advice/attention.

Storage

	Store away from incompatible materials.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

Disposal

	Dispose of waste and residues in accordance with local authority requirements.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information For further information, please contact the Product Stewardship Department at +1.800.862.4118.

2.3. Other hazards Radioactive. Radioactive material must be handled by qualified personnel in conformity with regulations appropriate to the government agency authorized to license the use of this radionuclide.

SECTION 3: Composition/information on ingredients

3.1. Substances

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Thorium Fluoride	100	13709-59-6 237-259-6	-	-	#

Classification: Skin Irrit. 2;H315, Eye Irrit. 2;H319, STOT SE 3;H335, Repr. 2;H361, Lact.;H362, STOT RE 2;H373

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.
DSD: Directive 67/548/EEC.
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret. #: This substance has been assigned Community workplace exposure limit(s).

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	Move to fresh air. Notify radiation safety personnel immediately. Call a physician if symptoms develop or persist. The amount of material inhaled should be assessed and documented.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Do not abrade skin. Always blot dry. Notify radiation safety personnel. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Remove contact lenses, if present and easy to do. Notify radiation safety personnel. Get medical attention if irritation develops and persists.
Ingestion	Notify radiation safety personnel immediately. Rinse mouth. Get medical attention if symptoms occur.
4.2. Most important symptoms and effects, both acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation.
4.3. Indication of any immediate medical attention and special treatment needed	Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards	No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire. Use fire-extinguishing media appropriate for surrounding materials.
5.2. Special hazards arising from the substance or mixture	During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Special firefighting procedures	Move containers from fire area if you can do so without risk.
Specific methods	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	Keep unnecessary personnel away. Avoid contact with spilled material.
For emergency responders	Keep unnecessary personnel away.
6.2. Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
6.3. Methods and material for containment and cleaning up	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. Clean up in accordance with all applicable regulations. Stop the flow of material, if this is without risk. Following product recovery, flush area with water.
6.4. Reference to other sections	Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid all personal contact. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash thoroughly after handling. Avoid release to the environment.
7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Store in a place accessible by authorised persons only. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Keep container tightly closed. Keep out of the reach of children. Store in accordance with local/regional/national/international regulation.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Material	Type	Value	Form
Thorium Fluoride (CAS 13709-59-6)	MAK	2,5 mg/m3	Inhalable fraction.
	STEL	12,5 mg/m3	Inhalable fraction.

Belgium. Exposure Limit Values

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	MAC	2,5 mg/m3

Czech Republic. OELs. Government Decree 361

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	Ceiling	5 mg/m3
	TWA	2,5 mg/m3

Denmark. Exposure Limit Values

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TLV	2,5 mg/m3

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances (Regulation No. 105/2001, Annex), as amended

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Finland. Workplace Exposure Limits

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	VME	2,5 mg/m3

Regulatory status: Regulatory indicative (VRI)

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	0,6 mg/m3

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Netherlands. OELs (binding)

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	STEL	2 mg/m3

Norway. Administrative Norms for Contaminants in the Workplace

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TLV	0,5 mg/m3

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Spain. Occupational Exposure Limits

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2 mg/m3

UK. EH40 Workplace Exposure Limits (WELs)

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Material	Type	Value
Thorium Fluoride (CAS 13709-59-6)	TWA	2,5 mg/m3

Biological limit values

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Material	Value	Determinant	Specimen	Sampling Time
Thorium Fluoride (CAS 13709-59-6)	8 mg/g	Fluoride	Creatinine in urine	*

Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)

Material	Value	Determinant	Specimen	Sampling Time
	4 mg/g	Fluoride	Creatinine in urine	*
	40 mmol/mol	Fluoride	Creatinine in urine	*
	24 mmol/mol	Fluoride	Creatinine in urine	*

* - For sampling details, please see the source document.

Czech Republic. Limit Values for Indictators of Biological Exposure Tests in Urine and Blood, Annex 2, Tables 1 and 2, Government Decree 432/2003 Sb.

Material	Value	Determinant	Specimen	Sampling Time
Thorium Fluoride (CAS 13709-59-6)	60 µmol/mmol	Fluoride	Creatinine in urine	*
	10 mg/g	Fluoride	Creatinine in urine	*

* - For sampling details, please see the source document.

France. Biological indicators of exposure (IBE) (National Institute for Research and Security (INRS, ND 2065)

Material	Value	Determinant	Specimen	Sampling Time
Thorium Fluoride (CAS 13709-59-6)	3 mg/g	Fluorures	Creatinine in urine	*
	10 mg/g	Fluorures	Creatinine in urine	*

* - For sampling details, please see the source document.

Germany. TRGS 903, BAT List (Biological Limit Values)

Material	Value	Determinant	Specimen	Sampling Time
Thorium Fluoride (CAS 13709-59-6)	7 mg/g	Fluorid	Creatinine in urine	*
	4 mg/g	Fluorid	Creatinine in urine	*

* - For sampling details, please see the source document.

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Material	Value	Determinant	Specimen	Sampling Time
Thorium Fluoride (CAS 13709-59-6)	7 mg/g	fluoride	Creatinine in urine	*
	4 mg/g	fluoride	Creatinine in urine	*
	42 µmol/mmol	fluoride	Creatinine in urine	*
	24 µmol/mmol	fluoride	Creatinine in urine	*

* - For sampling details, please see the source document.

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

Material	Value	Determinant	Specimen	Sampling Time
Thorium Fluoride (CAS 13709-59-6)	7 mg/g	Fluorides	Creatinine in urine	*
	4 mg/g	Fluorides	Creatinine in urine	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Material	Value	Determinant	Specimen	Sampling Time
Thorium Fluoride (CAS 13709-59-6)	3 mg/l	Fluoruros	Urine	*
	2 mg/l	Fluoruros	Urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Material	Value	Determinant	Specimen	Sampling Time
Thorium Fluoride (CAS 13709-59-6)	4 mg/l	Fluorid	Urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Ensure adequate ventilation, especially in confined areas.

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. Use personal protective equipment as required.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

- Hand protection Wear appropriate chemical resistant gloves. Rubber gloves. Suitable gloves can be recommended by the glove supplier.

- Other Wear suitable protective clothing. Lab coat.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures No smoking, eating or drinking should be allowed in any area where radioactive materials are handled or stored. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid.

Form Solid.

Colour Not available.

Odour Not available.

Odour threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapour pressure < 0,0000001 kPa (25 °C (77 °F))

Vapour density Not available.

Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

Molecular formula	F4Th
Molecular weight	308,03 g/mol

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Stable; however, may decompose if heated.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information It is widely accepted by the scientific community that exposure to sufficient quantities of ionizing radiation can potentially cause harmful biological effects which include cancer, leukaemia and genetic and teratogenic effects. Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Due to lack of data the classification is not possible.
Symptoms	Irritant effects.

11.1. Information on toxicological effects

Acute toxicity	May cause respiratory irritation.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

IARC Monographs. Overall Evaluation of Carcinogenicity

Thorium Fluoride (CAS 13709-59-6) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	May cause harm to breastfed babies. Suspected of damaging fertility or the unborn child.
Specific target organ toxicity - single exposure	Respiratory tract irritation.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.

Mixture versus substance information	No information available.
Other information	This product has no known adverse effect on human health.

SECTION 12: Ecological information

12.1. Toxicity	Contains a substance which causes risk of hazardous effects to the environment.
12.2. Persistence and degradability	No data is available on the degradability of this product.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

12.7. Additional information

Estonia Dangerous substances in soil Data

Thorium Fluoride (CAS 13709-59-6)	Fluoride (As F ion) 1200 mg/kg Fluoride (As F ion) 2000 mg/kg Fluoride (As F ion) 450 mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of in accordance with local regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Radioactive waste must be handled in accordance with procedures established by your Radiation Safety Officer, NRC and other applicable regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. UN number	UN2912
14.2. UN proper shipping name	RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-I), non fissile or fissile-excepted
14.3. Transport hazard class(es)	
Class	7
Subsidiary risk	-
Label(s)	7X
14.4. Packing group	Not available.
14.5. Environmental hazards	No.
14.6. Special precautions for user	Not available.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. UN number	UN2912
14.2. UN proper shipping name	Radioactive material, low specific activity (LSA-I) non-fissile or fissile excepted

14.3. Transport hazard class(es)

Class	7
Subsidiary risk	-

14.4. Packing group Not available.

14.5. Environmental hazards No.

ERG Code 7L

14.6. Special precautions for user Not available.

IMDG

14.1. UN number UN2912

14.2. UN proper shipping name RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-I) non fissile or fissile - excepted

14.3. Transport hazard class(es)

Class	7
Subsidiary risk	-

14.4. Packing group Not available.

14.5. Environmental hazards

Marine pollutant No.

EmS F-I, S-S

14.6. Special precautions for user Not available.

IATA; IMDG; RID

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 and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 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, as amended

Thorium Fluoride (CAS 13709-59-6)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

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

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations	The product is classified and labelled in accordance with EC directives or respective national laws The product does not need to be labelled in accordance with EC directives or respective nationa laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.
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	Not available.
References	ACGIH EPA: AQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents
Information on evaluation method leading to the classification of mixture	Not applicable.
Revision information	SECTION 8: Exposure controls/personal protection: Appropriate engineering controls Transport Information: Material Transportation Information
Training information	Follow training instructions when handling this material.
Disclaimer	Additional information is given in the Material Safety Data Sheet. Heeger Materials Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This document has been prepared using data from sources considered to be technically reliable and the information is believed to be correct. Heeger Materials makes no warranties, expressed or implied, as to the accuracy of the information contained herein. Heeger Materials cannot anticipate all conditions under which this information and its products may be used and the actual conditions of use are beyond its control. The user is responsible to evaluate all available information when using this product for any particular use and to comply with all Federal, State, Provincial and Local laws, statutes and regulations.