

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

- · Product identifier
- · Trade name: GC RELINE II Soft (Base)
- · Application of the substance / the mixture Manufacture of dental prothesis
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: GC America Inc. 3737 W. 127th Street Alsip, IL 60803 USA

sds@gcamerica.com

- · Information department: Regulatory Affairs
- · Emergency telephone number: During normal opening times (Mon.-Fri. 8:00 AM-5:00 PM CST): +1 (708) 597-0900 Transportation (CHEMTREC®) Emergency Telephone No. +1 (800) 424-9300

## **2 Hazard identification**

#### · Classification of the substance or mixture

Eye Irritation - Category 2A H319 Causes serious eye irritation.

#### · Additional information:

The information provided is in regards to the toxicity and hazard rating(s) of the individual component(s) in the formulation. The associated risk(s) depends on the route(s) of exposure. The hazard rating system is based entirely on the existence of the risk(s) and does not take into account the likelihood of reduced risk(s) through proper usage and handling.

#### Label elements

#### · GHS label elements

Exempt from requirements - product regulated as a medical device or an in vitro diagnostic medical device.

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



· Signal word Warning

#### Hazard statements

Causes serious eye irritation.

- · Precautionary statements
- Wash thoroughly after handling.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

(Contd. on page 2)

CA

Page 1/9

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

# Trade name: GC RELINE II Soft (Base)

(Contd. of page 1)

· Additional information:

5 % of the mixture consists of an ingredient or ingredients of unknown acute toxicity.

#### · Classification system:

• NFPA ratings (scale 0 - 4)

Health = 2 Fire = 0 Reactivity = 0

#### · HMIS-ratings (scale 0 - 4)

HEALTH2Health = 2FIRE0Fire = 0REACTIVITY0Reactivity = 0

# 3 Composition/Information on ingredients

#### Chemical characterization: Mixtures

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

<ul> <li>Dangerous compo</li> </ul>	onents:					
CAS: 112926-00-8	silicon dioxide, amorphous	30 - 60% w/w				
CAS: 68037-59-2	methylhydrogen dimethylpolysiloxane	1 - 5% w/w				

#### · Additional information:

If a substance is marked with \*\*, then substance is a trade secret. This is allowed under OSHA's Hazard Communication Standard (HCS) as a trade secret and under GHS as Confidential Business Information (CBI).

# 4 First aid measures

#### · Description of first aid measures · General information: Immediately remove any clothing soiled by the product. If symptoms persist consult doctor. · After inhalation: Supply fresh air: consult doctor in case of complaints. In case of unconsciousness place patient stably in side position for transportation. · After skin contact: Immediately wash with water and soap and rinse thoroughly. Rinse with warm water. Seek medical treatment. If symptoms persist consult doctor. · After eye contact: Protect unharmed eve. Rinse opened eye for several minutes under running water. Then consult a doctor. · After swallowing: Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor. · Information for doctor: · Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)

<sup>•</sup> CA

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

(Contd. of page 2)

Trade name: GC RELINE II Soft (Base)

# • Indication of any immediate medical attention and special treatment needed No further relevant information available.

# 5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

- For safety reasons unsuitable extinguishing agents: Water with full jet • Special hazards arising from the substance or mixture
- Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device.
- Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

# 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
 Remove persons from danger area.
 Avoid formation of dust.
 Avoid contact with the eyes and skin.
 Wear protective clothing.
 Environmental precautions:

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to penetrate the ground/soil. In case of seepage into the ground inform responsible authorities.

Methods and material for containment and cleaning up:
 Pick up mechanically.
 Prevent formation of dust.
 Dispose of the collected material according to regulations.
 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.

# 7 Handling and storage

- · Handling:
- Precautions for safe handling
- Observe instructions for use.
- Prevent formation of dust.

Any deposit of dust which cannot be avoided must be regularly removed.

Avoid contact with the eyes and skin.

• Information about protection against explosions and fires: Dust can combine with air to form an explosive mixture.

(Contd. on page 4)

CA -

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

# Trade name: GC RELINE II Soft (Base)

(Contd. of page 3)

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Store only in unopened original receptacles.
- · Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Observe instructions for use / storage.
- Keep receptacle tightly sealed.
- 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 item 7.
- · Control parameters

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

#### CAS: 112926-00-8 silicon dioxide, amorphous

- EL Long-term value: 4\* 1.5\*\* mg/m<sup>3</sup>
  - Precipitated and gel;\*total;\*\*respirable
- EV Long-term value: 10 mg/m<sup>3</sup>

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

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Breathing equipment:



Suitable respiratory protective device recommended.

#### · Protection of hands:



Protective gloves

# · 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.

(Contd. on page 5)

CA

(Contd. of page 4)

# Safety Data Sheet according to HPR, Schedule 1

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

Trade name: GC RELINE II Soft (Base)

· Eye protection: Safety glasses

Information on basic physical and General Information		
Appearance:		
Form:	Pasty	
Color: Odor:	Pink Undetermined	
Odor threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not determined.	
Ignition temperature:	Undetermined.	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not self-igniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Insoluble.	
Partition coefficient (n-octanol/wat	er): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent content:		
Solids content:	100.0 %	
Other information	No further relevant information available.	

(Contd. on page 6)

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

Trade name: GC RELINE II Soft (Base)

(Contd. of page 5)

#### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability Stable at ambient temperature.
- 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: No further relevant information available.
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- Additional toxicological information: The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
silicon dioxide, amorphous	3
Colorant	3
· NTP (National Toxicology Program)	
Nana of the ingradiante is listed	

None of the ingredients is listed.

· Carcinogenic categories' legend:

IARC Group 1: The agent is carcinogenic to humans.

IARC Group 2A: The agent is probably carcinogenic to humans.

IARC Group 2B: The agent is possibly carcinogenic to humans.

IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

IARC Group 4: The agent is probably not carcinogenic to humans.

NTP K: Known to be human carcinogen.

NTP R: Reasonably anticipated to be human carcinogen.

- · Repeated dose toxicity. No further relevant information available.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) No further relevant information available.
  - No further relevant information available.

#### **12 Ecological information**

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.

(Contd. on page 7)

CA

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

# Trade name: GC RELINE II Soft (Base)

(Contd. of page 6)

- · 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 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

- · 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:

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

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.

· UN-Number · DOT, TDG, ADN, IMDG, IATA	Void	
	Volu	
<ul> <li>UN proper shipping name</li> <li>DOT, TDG, ADN, IMDG, IATA</li> </ul>	Void	
· Transport hazard class(es)		
· DOT, TDG, ADN, IMDG, IATA · Class	Void	
<ul> <li>Packing group</li> <li>DOT, TDG, IMDG, IATA</li> </ul>	Void	
· Environmental hazards:		
· Marine pollutant:	No	
· Special precautions for user	Not applicable.	
· Transport in bulk according to Annex	x II of	
MARPOL73/78 and the IBC Code	Not applicable.	
· UN "Model Regulation":	Void	

(Contd. on page 8)

Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

Trade name: GC RELINE II Soft (Base)

(Contd. of page 7)

#### **15 Regulatory information**

- Safety, health and environmental regulations/legislation specific for the substance or mixture SARA (Superfund Amendments and Reauthorization Act)
- · Section 355 (extremely hazardous substances):
- None of the ingredients is listed.
- Section 313 (Specific toxic chemical listings):
- None of the ingredients is listed.

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

- methylhydrogen dimethylpolysiloxane
- · Canadian substance listings:

#### · Canadian Domestic Substances List (DSL)

vinyl dimethylpolysiloxane

vinyl dimethylpolysiloxane

methylhydrogen dimethylpolysiloxane

Colorant

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

#### · Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

· GHS label elements

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

· Hazard pictograms



· Signal word Warning

Hazard statements

Causes serious eye irritation.

Precautionary statements

Wash thoroughly after handling.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- If eye irritation persists: Get medical advice/attention.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# **16 Other information**

- · Department issuing SDS: Regulatory Affairs
- · Contact:

Regulatory Affairs Telephone No. +1 (708) 597-0900 sds@gcamerica.com Printing date 03/13/2018

Version CA-EN-Rev 1

Reviewed on 01/09/2018

# Trade name: GC RELINE II Soft (Base)

<ul> <li>Date of preparation / last revision 03/13/2018 / -</li> <li>Abbreviations and acronyms: GHS: Globally Harmonized System of Classification and Labelling of Chemicals HCS: Hazard Communication Standard (USA) MSDS: Material Safety Data Sheet SDS: Safety Data Sheet ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways) ECHA: European Chemicals Agency OSHA: Occupational Safety and Health Administration (USA) LEL: Lower Explosive Limit UEL: Upper Explosive Limit UEL: Upper Explosive Limit UEL: Upper Explosive Limit UIDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) L50: Lethal concentration, 50 percent LDSO: Lethal concentration, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Sources</li> <li>Manufacturers' MSDSs/SDSs</li> <li>OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)</li> <li>TOXNET (http://ckna.europa.eu/)</li> <li>EnviChem (www.echemportal.org)</li> <li>Notes: CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC@ is a registered Service mark of the American Chemical Society. CHEMTREC@ is a registered service mark of the American Chemical Society.</li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> </ul>		(Contd. of page 8)
GHS: Globalty Harmonized System of Classification and Labelling of Chemicals HCS: Hazard Communication Standard (USA) MSDS: Material Safety Data Sheet SDS: Safety Data Sheet ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways) ECHA: European Chemicals Agency OSHA: Occupational Safety and Health Administration (USA) LEL: Lower Explosive Limit UEL: Upper Explosive Limit UBC: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent DBT: Persistent, Bioaacumulative and Toxic vPVB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://toxnet.nlm.nin.gov/) • ECHA (https://toxnet.nlm.nin.gov/) • ECHA (http://toxnet.nlm.nin.gov/) • ECHA (http://toxnet.nlm.nin.gov/) • ECHA (http://toxnet.nlm.nin.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) • <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. • <b>* Data compared to the previous version altered.</b> This version replaces all previous versions.	<ul> <li>Date of preparation / last revision 03/13/2018 / -</li> </ul>	
HGS: Hazard Communication Standard (USA) MSDS: Material Safety Data Sheet SDS: Safety Data Sheet ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways) ECHA: European Chemicals Agency OSHA: Occupational Safety and Health Administration (USA) LEL: Lower Explosive Limit UEL: Upper Explosive Limit IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (https://toxnet.nlm.nih.gov/) • ECHA (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) • <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. • <b>* Data compared to the previous version altered.</b> This version replaces all previous versions.	<ul> <li>Abbreviations and acronyms:</li> </ul>	
MSDS: Material Safety Data Sheet SDS: Safety Data Sheet ADN: Accord européen relatif au transport international Carriage of Dangerous Goods by Inland Waterways) ECHA: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways) ECHA: European Chemicals Agency OSHA: Occupational Safety and Health Administration (USA) LEE: Lower Explosive Limit UE: Upper Explosive Limit UE: Upper Explosive Limit UE: Upper Explosive Limit MDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal concentration, 50 percent DST: Persistent, Bioaccumulative and Toxic VPVB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://toxnet.nlm.nih.gov/) • ECHA (https://toxnet.nlm.nih.gov/) • ECHA (http://toxnet.nlm.nih.gov/) • ENViChem (www.echemportal.org) • Notes: CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. • <b>bata compared to the previous version altered.</b> This version replaces all previous versions.		
SDS: Safety Data Sheet ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Chemicals Agency OSHA: Occupational Safety and Health Administration (USA) LEL: Lower Explosive Limit UEL: Upper Explosive Limit UEL: Upper Explosive Limit IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal dose, 50 percent DD5: USD epertent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://cha.europa.eu/) • ECHA (http://cha.europa.eu/) • ECNA (http://cha.europa.eu/) • ECNA (http://cha.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. <b>* Data compared to the previous version altered.</b> This version replaces all previous versions. <b>Disclaimer:</b>		
ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways) ECHA: European Chemicals Agency OSHA: Occupational Safety and Health Administration (USA) LEL: Lower Explosive Limit UEL: Upper Explosive Limit UEL: Upper Explosive Limit UAT: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent DBT: Persistent, Bioaccumulative and Toxic vPVB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://toxnet.nlm.nih.gov/) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://toxnet.nlm.nih.gov/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. <b>* Data compared to the previous version altered.</b> This version replaces all previous versions. <b>Disclaimer:</b>		
<ul> <li>(European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways)</li> <li>ECHA: European Chemicals Agency</li> <li>OSHA: Occupational Safety and Health Administration (USA)</li> <li>LEL: Lower Explosive Limit</li> <li>UEL: Upper Explosive Limit</li> <li>UBC: International Maritime Code for Dangerous Goods</li> <li>DOT: US Department of Transportation</li> <li>IATA: International Air Transport Association</li> <li>CAS: Chemical Abstracts Service (division of the American Chemical Society)</li> <li>NFPA: National Fire Protection Association (USA)</li> <li>HMIS: Hazardous Materials Identification System (USA)</li> <li>LCS0: Lethal dose, 50 percent</li> <li>PBT: Persistent, Bioaccumulative and Toxic</li> <li>vPVB: very Persistent and very Bioaccumulative</li> <li>Sources</li> <li>• Manufacturers' MSDSs/SDSs</li> <li>• OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)</li> <li>• TOXNET (http://toxnet.nlm.nih.gov/)</li> <li>• ECHA (http://toxnet.nlm.nih.gov/)</li> <li>• ENVIChem (www.echemportal.org)</li> <li>Notes:</li> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society.</li> <li>CHEMTREC® is a registered service mark of the American Chemical Society.</li> <li><b>* Data compared to the previous version altered.</b> This version replaces all previous versions.</li> </ul>		
<ul> <li>ÈCHÁ: European Chemicals Agency</li> <li>OSHA: Occupational Safety and Health Administration (USA)</li> <li>LE: Lower Explosive Limit</li> <li>IMDG: International Maritime Code for Dangerous Goods</li> <li>DOT: US Department of Transportation</li> <li>IATA: International Air Transport Association</li> <li>CAS: Chemical Abstracts Service (division of the American Chemical Society)</li> <li>NFPA: National Fire Protection Association (USA)</li> <li>HMIS: Hazardous Materials Identification System (USA)</li> <li>LC50: Lethal concentration, 50 percent</li> <li>D51: US Dercent</li> <li>D51: US Dercent</li> <li>D51: US Dercent</li> <li>D51: Versistent, Bioaccumulative and Toxic</li> <li>vPvB: very Persistent and very Bioaccumulative</li> <li>Sources</li> <li>• Manufacturers' MSDSs/SDSs</li> <li>• OSHA (https://toxnet.nlm.nih.gov/)</li> <li>• ECHA (http://toxnet.nlm.nih.gov/)</li> <li>• ECHA (http://toxnet.nlm.nih.gov/)</li> <li>• ECHA (http://toxnet.nlm.nih.gov)</li> <li>• EnviChem (www.echemportal.org)</li> <li>Notes:</li> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.</li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> <li>Disclaimer:</li> </ul>		
OSHA: Occupational Safety and Health Administration (USA) LEL: Lower Explosive Limit UEL: Upper Explosive Limit UBC: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LCS0: Lethal concentration, 50 percent LD50: Lethal concentration, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://cha.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * <b>Data compared to the previous version altered.</b> This version replaces all previous versions. <b>Disclaimer:</b>		(33)
LEL: Lower Explosive Limit UEL: Upper Explosive Limit UDC: International Maritime Code for Dangerous Goods DOT: US Department of Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal dose, 50 percent DS0: Lethal dose, 50 percent DS0: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. <b>Disclaimer:</b>		
IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent DSD: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemical Society. <b>bisclaimer:</b>		
DOT: US Department of Transportation IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent DD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://toxnet.nlm.nih.gov/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. <b>Disclaimer:</b>		
IATA: International Air Transport Association CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. <b>Disclaimer:</b>		
CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * <b>Data compared to the previous version altered.</b> This version replaces all previous versions. <b>Disclaimer:</b>		
NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent D50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. <b>* Data compared to the previous version altered.</b> This version replaces all previous versions. <b>Disclaimer:</b>		
HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. <b>* Data compared to the previous version altered.</b> This version replaces all previous versions. <b>Disclaimer:</b>		
LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. <b>Disclaimer:</b>		
LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative <b>Sources</b> • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) <b>Notes:</b> CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. <b>Disclaimer:</b>		
<ul> <li>PBT: Persistent, Bioaccumulative and Toxic</li> <li>vPvB: very Persistent and very Bioaccumulative</li> <li>Sources <ul> <li>Manufacturers' MSDSs/SDSs</li> <li>OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)</li> <li>TOXNET (http://toxnet.nlm.nih.gov/)</li> <li>ECHA (http://echa.europa.eu/)</li> <li>EnviChem (www.echemportal.org)</li> </ul> </li> <li>Notes: <ul> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society.</li> <li>CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.</li> </ul> </li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> </ul>		
Sources • Manufacturers' MSDSs/SDSs • OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html) • TOXNET (http://toxnet.nlm.nih.gov/) • ECHA (http://echa.europa.eu/) • EnviChem (www.echemportal.org) Notes: CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. Disclaimer:		
<ul> <li>Manufacturers' MSDSs/SDSs</li> <li>OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)</li> <li>TOXNET (http://toxnet.nlm.nih.gov/)</li> <li>ECHA (http://echa.europa.eu/)</li> <li>EnviChem (www.echemportal.org)</li> <li>Notes:</li> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society.</li> <li>CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.</li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> <li>Disclaimer:</li> </ul>	vPvB: very Persistent and very Bioaccumulative	
<ul> <li>OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)</li> <li>TOXNET (http://toxnet.nlm.nih.gov/)</li> <li>ECHA (http://echa.europa.eu/)</li> <li>EnviChem (www.echemportal.org)</li> <li>Notes:</li> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society.</li> <li>CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.</li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> <li>Disclaimer:</li> </ul>	Sources	
<ul> <li>TOXNET (http://toxnet.nlm.nih.gov/)</li> <li>ECHA (http://echa.europa.eu/)</li> <li>EnviChem (www.echemportal.org)</li> <li>Notes:</li> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society.</li> <li>CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.</li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> <li>Disclaimer:</li> </ul>	Manufacturers' MSDSs/SDSs	
<ul> <li>TOXNET (http://toxnet.nlm.nih.gov/)</li> <li>ECHA (http://echa.europa.eu/)</li> <li>EnviChem (www.echemportal.org)</li> <li>Notes:</li> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society.</li> <li>CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.</li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> <li>Disclaimer:</li> </ul>	OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)	
<ul> <li>ECHA (http://echa.europa.eu/)</li> <li>EnviChem (www.echemportal.org)</li> <li>Notes:</li> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society.</li> <li>CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.</li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> <li>Disclaimer:</li> </ul>		
<ul> <li>EnviChem (www.echemportal.org)</li> <li>Notes:</li> <li>CAS Registry Number is a Registered Trademark of the American Chemical Society.</li> <li>CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.</li> <li>* Data compared to the previous version altered. This version replaces all previous versions.</li> <li>Disclaimer:</li> </ul>		
Notes: CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. Disclaimer:		
CAS Registry Number is a Registered Trademark of the American Chemical Society. CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. Disclaimer:		
CHEMTREC® is a registered service mark of the American Chemistry Council, Inc. * Data compared to the previous version altered. This version replaces all previous versions. Disclaimer:		
* Data compared to the previous version altered. This version replaces all previous versions. Disclaimer:		
Disclaimer:	CHEMTREC® is a registered service mark of the American Chemistry Council, In	С.
	* Data compared to the previous version altered. This version replaces all prev	vious versions.
	Disclaimer:	
The information contained herein is believed to be the and accurate. However, all statements	The information contained herein is believed to be true and accurate. How	ever all statements
recommendations or suggestions are made without any guarantee, representation or warranty, express		
or implied, on our part. Therefore, no warranty is made or to be implied that the information set out in		

or implied, on our part. Therefore, no warranty is made or to be implied that the information set out in this document is accurate or complete, and we accordingly exclude all liability in connection with the use of this information or the products referred to herein. All such risks are assumed by the purchaser/user. The information contained herein is also subject to change without notice. For the avoidance of doubt, however, nothing in this document excludes or limits our liability for death or personal injury caused by our negligence or for fraudulent misrepresentation.

CA -