



## SAFETY DATA SHEET

in accordance with REACH (1907/2006/EC, as amended by 2015/830/EU) 29 CFR 1910.1200 and WHMIS 2015

**Revision date:** 17 December 2018

**Initial date of issue:** 6 July 2007

**SDS No.** 374B-12

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

ARC CS2 (Part B)

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

For use as a coating on properly prepared surfaces where mild chemical and abrasion exposures are anticipated.

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

##### Company:

A.W. CHESTERTON COMPANY  
860 Salem Street  
Groveland, MA 01834-1507, USA  
Tel. +1 978-469-6446 Fax: +1 978-469-6785  
(Mon. - Fri. 8:30 - 5:00 PM EST)  
SDS requests: [www.chesterton.com](http://www.chesterton.com)  
E-mail (SDS questions): [ProductMSDSs@chesterton.com](mailto:ProductMSDSs@chesterton.com)  
E-mail: [customer.service@chesterton.com](mailto:customer.service@chesterton.com)

##### Supplier:

Canada: A.W. Chesterton Company Ltd., 889 Fraser Drive,  
Unit 105, Burlington, Ontario L7L 4X8 – Tel. 905-335-5055  
EU: Chesterton International GmbH, Am Lenzenfleck 23,  
D85737 Ismaning, Germany – Tel. +49-89-996-5460

#### 1.4. Emergency telephone number

24 hours per day, 7 days per week  
Call Infotrac: 1-800-535-5053  
Outside N. America: +1 352-323-3500 (collect)  
NSW Poisons Information Centre (Australia): 13 11 26

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### 2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP] / GHS

Acute toxicity, Category 4, H302  
Skin irritation, Category 2, H315  
Serious eye damage, Category 1, H318  
Skin sensitization, Category 1, H317  
Acute toxicity, Category 3, H331 (mist)  
Reproductive toxicity, Category 1B, H360F  
Reproductive toxicity, Category 2, H361d  
Specific target organ toxicity – repeated exposure, Category 2, H373 (oral)  
Hazardous to the aquatic environment, Chronic, Category 1, H410

##### 2.1.2. Classification according to 29 CFR 1910.1200 / WHMIS 2015 / GHS

Same as section 2.1.1.

##### 2.1.3. Australian statement of hazardous nature

Hazardous according to criteria of Safe Work Australia.

##### 2.1.4. Additional information

For full text of H-statements: see SECTIONS 2.2 and 16.

**2.2. Label elements****2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP] / GHS****Hazard pictograms:****Signal word:**

Danger

**Hazard statements:**

H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H317 May cause an allergic skin reaction.  
 H331 Toxic if inhaled.  
 H360F May damage fertility.  
 H361d Suspected of damaging the unborn child.  
 H373 May cause damage to organs through prolonged or repeated exposure if swallowed.  
 H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements:**

P201 Obtain special instructions before use.  
 P260 Do not breathe mist/spray.  
 P264 Wash hands thoroughly after handling.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/clothing and eye/face protection.  
 P304/340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER or doctor.  
 P308/313 IF exposed or concerned: Get medical advice/attention.  
 P363 Wash contaminated clothing before reuse.  
 P391 Collect spillage.

**Supplemental information:** None**2.2.2. Labelling according to 29 CFR 1910.1200 / WHMIS 2015 / GHS****Hazard pictograms:** Same as section 2.2.1.**Signal word:** Same as section 2.2.1.**Hazard statements:** Same as section 2.2.1.

**Precautionary statements:** P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 260 Do not breathe mist/spray.  
 P264 Wash hands thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P271 Use only outdoors or in a well-ventilated area.  
 P272 Contaminated work clothing must not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/clothing and eye/face protection.  
 P302/352 IF ON SKIN: Wash with plenty of soap and water.  
 P304/340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P310 Immediately call a POISON CENTER or doctor.  
 P308/313 IF exposed or concerned: Get medical advice/attention.  
 P363 Wash contaminated clothing before reuse.  
 P391 Collect spillage.  
 P405 Store locked up.  
 P501 Dispose of contents/container to an approved waste disposal plant.

**Supplemental information:** None**2.3. Other hazards**

None known

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**

Hazardous Ingredients <sup>1</sup>	% Wt.	CAS No./ EC No.	REACH Reg. No.	CLP/GHS Classification
Methyleneoxide, polymer with benzenamine, hydrogenated	10-40	135108-88-2 1842-44	05-211447 1842-44	Acute Tox. 4, H302 Skin Corr. 1C, H314 Skin Sens. 1, H317 STOT RE 2, H373 (oral) Aquatic Chronic 3, H412
Diethylenetriamine*	5-10	111-40-0 203-865-4	01-211947 3793-27	Acute Tox. 2, H330 Acute Tox. 4, H302/312 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Skin Sens. 1, H317
Bisphenol A**	3-7	80-05-7 201-245-8	01-211945 7856-23	Repr. 1B, H360F STOT SE 3, H335 Eye Dam. 1, H318 Skin Sens. 1, H317
4-Nonylphenol, branched**	1-5	84852-15-3 284-325-5	NA	Repr. 2, H361fd Acute Tox. 4, H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 (M-factor acute/chronic: 10)
Tetraethylenepentamine	1-5	112-57-2 203-986-2	01-211948 7290-37	Acute Tox. 4, H312/H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 2, H411
N-(3-(trimethoxysilyl)propyl)ethylenediamine	0.1-0.9	1760-24-3 217-164-6	01-211997 0215-39	Acute Tox. 4, H332 Eye Dam. 1, H318 Skin Sens. 1, H317

Other ingredients:

Silica (Quartz)	1-3	14808-60-7 238-878-4	NA	Not classified***
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For full text of H-statements: see SECTION 16.

\*This component is toxic by inhalation if sprayed or if aerosol/mist is created. Refer to section 11 for additional toxicity information.

\*\*Included on the EU Candidate List of substances of very high concern for Authorisation.

\*\*\*Substance with a workplace exposure limit.

<sup>1</sup> Classified according to:

- 29 CFR 1910.1200, 1915, 1916, 1917, Mass. Right-to-Know Law (ch. 40, M.G.L.O. 111F)
- 1272/2008/EC, GHS, REACH
- WHMIS 2015
- Safe Work Australia

**SECTION 4: FIRST AID MEASURES****4.1. Description of first aid measures**

<b>Inhalation:</b>	Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.
<b>Skin contact:</b>	Wash skin with soap and water. Remove contaminated clothing and wash before reuse. Consult physician.
<b>Eye contact:</b>	Flush eyes for at least 30 minutes with large amounts of water. Contact physician immediately.
<b>Ingestion:</b>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If person is conscious, rinse mouth with water and give small quantities of water to drink. Contact physician immediately.
<b>Protection of first-aiders:</b>	No action shall be taken involving any personal risk or without suitable training. Avoid contact with the product while providing aid to the victim. Do not breathe mist. See section 8 for recommendations on personal protective equipment.

**4.2. Most important symptoms and effects, both acute and delayed**

Risk of serious damage to eyes. Irritating to skin. High vapor concentrations and mist can cause severe eye and respiratory tract irritation, headache, dizziness, nausea and possibly shortness of breath. Toxic if inhaled (mist). Harmful if swallowed. Product is readily absorbed through the skin and may cause nausea, headache and general discomfort. Prolonged or repeated contact may cause asthma, skin sensitization and other allergic responses. May damage the unborn child. Suspected of damaging the unborn child.

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

Treat symptoms.

**SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing media**

**Suitable extinguishing media:** Carbon dioxide, dry chemical, foam or water fog

**Unsuitable extinguishing media:** Water jets

**5.2. Special hazards arising from the substance or mixture**

May generate: ammonia gas, toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions.

**5.3. Advice for firefighters**

Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

**Flammability Classification:** –

**HAZCHEM Emergency Action Code:** 2 Z

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Utilize exposure controls and personal protection as specified in Section 8.

**6.2. Environmental Precautions**

Keep out of sewers, streams and waterways.

**6.3. Methods and material for containment and cleaning up**

Evacuate area. Provide adequate ventilation. Scoop up and transfer to a suitable container for disposal. Flush final traces of spill with water.

**6.4. Reference to other sections**

Refer to section 13 for disposal advice.

**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Do not handle until all safety precautions have been read and understood. Do not breathe spray. Utilize exposure controls and personal protection as specified in Section 8. Do not contaminate with sodium nitrite or other nitrosating agents, which could cause the formation of cancer-causing nitrosamine. Do not eat, drink or smoke when using this product. Remove contaminated clothing and wash before reuse. Contaminated work clothing must not be allowed out of the workplace. Contaminated leather including shoes cannot be decontaminated and should be discarded. Avoid creating and breathing dust during removal, drilling, grinding, sawing or sanding.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in a cool, dry area.

**7.3. Specific end use(s)**

No special precautions.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limit values**

Ingredients	OSHA PEL <sup>1</sup>		ACGIH TLV <sup>2</sup>		UK WEL <sup>3</sup>		AUSTRALIA ES <sup>4</sup>	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Methyleneoxide, polymer with benzenamine, hydrogenated	–	–	–	–	–	–	–	–
Diethylenetriamine	–	–	1 (skin)	4.2	1 (skin)	4.3	1 (skin)	4.2
Bisphenol A*	–	–	–	–	–	–	–	–
Nonylphenol	–	–	–	–	–	–	–	–
Tetraethylenepentamine	–	–	–	–	–	–	–	–
N-(3-(trimethoxysilyl)propyl)ethylene diamine	–	–	–	–	–	–	–	–
Silica (Quartz)	(resp.) (total)	0.05 0.3	(resp.)	0.025	(resp.)	0.1	(resp.)	0.1

\*European Union Occupational Exposure Limit Value: 2 mg/m<sup>3</sup> (inhalable aerosol)

<sup>1</sup> United States Occupational Health & Safety Administration permissible exposure limits

<sup>2</sup> American Conference of Governmental Industrial Hygienists threshold limit values

<sup>3</sup> EH40 Workplace exposure limits, Health & Safety Executive

<sup>4</sup> Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003]

**Biological limit values**

Not available

**Derived No Effect Level (DNEL) according to Regulation (EC) No 1907/2006:****Workers**

Substance	Route of exposure	Potential health effects	DNEL
Diethylenetriamine	Inhalation	Acute effects, systemic	92.1 mg/m <sup>3</sup>
		Chronic effects, local	2.6 mg/m <sup>3</sup>
		Chronic effects, systemic	15.4 mg/m <sup>3</sup>
	Dermal	Chronic effects, local	0.87 mg/m <sup>3</sup>
		Chronic effects, local	1.1 mg/cm <sup>3</sup>
		Chronic effects, systemic	11.4 mg/kg bw/day
N-(3-(trimethoxysilyl)propyl)ethylenediamine	inhalation	Chronic effects, systemic	35.3 mg/m <sup>3</sup>
		Acute effects, systemic	5 mg/kg bw/day
	Dermal	Chronic effects, systemic	5 mg/kg bw/day

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No 1907/2006:**

Substance	Environmental protection target	PNEC
Diethylenetriamine	Fresh water	0.56 mg/l
	Freshwater sediments	1072 mg/kg
	Marine water	0.056 mg/l
	Marine sediments	107.2 mg/kg
	Water, intermittent release	0.32 mg/l
	Soil (agricultural)	214 mg/kg
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Fresh water	0.062 mg/l
	Freshwater sediments	0.048 mg/kg
	Marine water	0.0062 mg/l
	Marine sediments	0.0048 mg/kg
	Microorganisms in sewage treatment	25 mg/l
	Soil (agricultural)	0.0075 mg/kg

**8.2. Exposure controls****8.2.1. Engineering measures**

Provide sufficient ventilation to keep the concentrations below the exposure limits. If it is necessary to alter the final cured product such that dust may be generated, use adequate dust extraction or damp down.

**8.2.2. Individual protection measures**

**Respiratory protection:** In case of insufficient ventilation, use a self-contained breathing apparatus (SCBA), supplied air respirator (SAR) or air-purifying respirator (APR) with a suitable filter (e.g., EN filter type A-P2). During spraying, wear suitable respiratory equipment.

**Protective gloves:** Chemical resistant gloves (e.g., natural rubber or neoprene)

Diethylenetriamine:

Contact type	Glove material	Layer thickness	Breakthrough time*
Full	neoprene	0.65 mm	> 480 min.
Splash	natural rubber	0.6 mm	> 60 min.

\*Determined according to EN374 standard.

**Eye and face protection:** Full face shield with goggles underneath.

**Other:** Impervious clothing as necessary to prevent skin contact.

**8.2.3. Environmental exposure controls**

Refer to sections 6 and 12.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	paste	<b>Odour</b>	amine odor
<b>Colour</b>	tan	<b>Odour threshold</b>	not determined
<b>Initial boiling point</b>	not determined	<b>Vapour pressure @ 20°C</b>	not determined
<b>Melting point</b>	not determined	<b>% Aromatics by weight</b>	0%
<b>% Volatile (by volume)</b>	0%	<b>pH</b>	not applicable
<b>Flash point</b>	121°C (250°F)	<b>Relative density</b>	1.25 kg/l
<b>Method</b>	PM Closed Cup	<b>Weight per volume</b>	10.4 lbs/gal.
<b>Viscosity</b>	8K cps @ 25°C	<b>Coefficient (water/oil)</b>	< 1
<b>Autoignition temperature</b>	not determined	<b>Vapour density (air=1)</b>	> 1
<b>Decomposition temperature</b>	not determined	<b>Rate of evaporation (ether=1)</b>	< 1
<b>Upper/lower flammability or explosive limits</b>	not determined	<b>Solubility in water</b>	insoluble
<b>Flammability (solid, gas)</b>	not applicable	<b>Oxidising properties</b>	not determined
<b>Explosive properties</b>	not determined		

**9.2. Other information**

None

**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

Refer to sections 10.3 and 10.5.

**10.2. Chemical stability**

Stable

**10.3. Possibility of hazardous reactions**

No dangerous reactions known under conditions of normal use.

**10.4. Conditions to avoid**

Open flames and high temperatures.

**10.5. Incompatible materials**

Strong acids and strong oxidizers like liquid Chlorine and concentrated Oxygen. Reactive metals. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.

**10.6. Hazardous decomposition products**

Nitric acid, NO<sub>x</sub>, Ammonia, Carbon Monoxide, Carbon Dioxide, aldehydes, flammable hydrocarbon fragments and other toxic fumes.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects**

**Primary route of exposure under normal use:** Inhalation, skin and eye contact. Personnel with pre-existing allergies, eczema or skin conditions may be aggravated by exposure.

**Acute toxicity -****Oral:**

Harmful if swallowed. May be harmful in contact with skin. ATE-mix: 998.6 mg/kg.

Substance	Test	Result
Formaldehyde, polymer with benzenamine, hydrogenated	LD50, rat	449 mg/kg
Diethylenetriamine	LD50, rat	1080 mg/kg
Bisphenol A	LD50, rat	3250 mg/kg
4-Nonylphenol, branched	LD50, rat	1300 mg/kg
Tetraethylenepentamine	LD50, rat	2100 mg/kg
N-(3-(trimethoxysilyl)propyl)ethylenediamine	LD50, rat	2413 mg/kg

**Dermal:**

Product is readily absorbed through the skin and may cause nausea, headache and general discomfort. May be harmful in contact with skin. ATE-mix: 2922 mg/kg.

Substance	Test	Result
Formaldehyde, polymer with benzenamine, hydrogenated	LD50, rat	2673 mg/kg
Diethylenetriamine	LD50, rabbit	1045 mg/kg
Bisphenol A	LD50, rabbit	3600 mg/kg
4-Nonylphenol, branched	LDLo, rabbit	3160 mg/kg
Tetraethylenepentamine	LD50, rabbit	660 mg/kg (RTECS)
N-(3-(trimethoxysilyl)propyl)ethylenediamine	LD50, rat	20009 mg/kg

**Inhalation:**

Toxic if inhaled (aerosol/mist). High vapor concentrations and mist can cause severe eye and respiratory tract irritation, headache, dizziness, nausea and possibly shortness of breath. ATE-mix: 0.76 mg/l (mist).

Substance	Test	Result
Diethylenetriamine	LC50, rat, 4 h	> 0.07-<0.3 mg/l/4 h (mist)
Diethylenetriamine	LC50, rat, 4 h	No mortality at vapor saturation level
Bisphenol A	LC0, rat, 6 h	0.17 mg/l (mist, maximum attainable concentration)
N-(3-(trimethoxysilyl)propyl)ethylenediamine	LD50 Inhalation, rat	> 1.49 mg/l (mist)

**Skin corrosion/irritation:**

Irritating to skin.

Substance	Test	Result
ARC CS2 (Part B)	Corrositex® (OECD 435)	Non-corrosive
Diethylenetriamine	Skin irritation, rabbit	Corrosive

**Serious eye damage/irritation:**

Risk of serious damage to eyes.

Substance	Test	Result
Diethylenetriamine	Eye irritation	Corrosive

**Respiratory or skin sensitisation:** Prolonged or repeated contact may cause asthma, skin sensitization and other allergic responses.

Substance	Test	Result
Diethylenetriamine	Skin sensitization, guinea pig	Sensitizing

**Germ cell mutagenicity:** Diethylenetriamine: based on available data, the classification criteria are not met.

**Carcinogenicity:** Repeated inhalation of respirable free silica may cause scarring of the lungs with cough and shortness of breath. Silicosis, a delayed lung injury that is a disabling, progressive and sometimes fatal pulmonary fibrosis, may result. The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have classified inhaled silica as a human carcinogen. The silica in this product does not separate from the mixture or in of itself become air-borne, therefore it does not present a hazard in normal use.

**Reproductive toxicity:** Bisphenol A has produced effects on fertility in animal ingestion studies. 4-Nonylphenol, branched: has been shown to cause reproductive/teratogenic effects in laboratory animals. Diethylenetriamine: not expected to cause toxicity.

**STOT – single exposure:** Diethylenetriamine, Bisphenol A: may cause respiratory irritation.

**STOT – repeated exposure:** May cause damage to organs through prolonged or repeated exposure if swallowed.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

**Other information:** None known

## SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar substances.

### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects. Nonylphenol: 48 h EC50 (for daphnia) = 0.0848 mg/l.

### 12.2. Persistence and degradability

Diethylenetriamine, Tetraethylenepentamine: expected to be resistant to biodegradation. Bisphenol A, Nonylphenol: inherently biodegradable. N-(3-(trimethoxysilyl)propyl)ethylenediamine: hydrolyzes in water or moist air, releasing methanol and organosilicons; biodegradation 50% (OECD 301A, 28 days).

### 12.3. Bioaccumulative potential

Diethylenetriamine, Tetraethylenepentamine, Bisphenol A: bioconcentration in aquatic organisms is not expected to be significant. Nonylphenol: may bioaccumulate in fish and aquatic organisms. N-(3-(trimethoxysilyl)propyl)ethylenediamine: not expected to bioaccumulate.

### 12.4. Mobility in soil

Paste. Insoluble in water. In determining environmental mobility, consider the product's physical and chemical properties (see Section 9). Diethylenetriamine, Tetraethylenepentamine: expected to be highly mobile in soil. Bisphenol A: expected to have moderate to low mobility in soil. Nonylphenol: expected to be immobile in soil.

### 12.5. Results of PBT and vPvB assessment

Not available

### 12.6. Other adverse effects

None known

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Combine resin and curative. The final cured material is considered nonhazardous. Landfill sealed containers with a properly licensed facility. May be incinerated at an appropriate facility. Unreacted components are a special waste (classified as hazardous according to 2008/98/EC). Check local, state and national/federal regulations and comply with the most stringent requirement.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN number

**ADG/ADR/RID/ADN/IMDG/ICAO:** UN3082  
**TDG:** UN3082  
**US DOT:** UN3082

### 14.2. UN proper shipping name

**ADG/ADR/RID/ADN/IMDG/ICAO:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
 (TETRAETHYLENEPENTAMINE)



**TDG:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAETHYLENEPENTAMINE)  
**US DOT:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TETRAETHYLENEPENTAMINE)

**14.3. Transport hazard class(es)**

**ADG/ADR/RID/ADN/IMDG/ICAO:** 9  
**TDG:** 9  
**US DOT:** 9

**14.4. Packing group**

**ADG/ADR/RID/ADN/IMDG/ICAO:** III  
**TDG:** III  
**US DOT:** III

**14.5. Environmental hazards**

MARINE POLLUTANT

**14.6. Special precautions for user**

NO SPECIAL PRECAUTIONS FOR USER

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

NOT APPLICABLE

**14.8. Other information**

**US DOT:** ERG NO.171,

May be shipped as NON-RESTRICTED in non-bulk packagings (119 gallons or less) by motor vehicle, rail car or aircraft. (49 CFR 171.4(c))

**IMDG:** EmS. F-A, S-F

May be shipped as NON-RESTRICTED in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less. (IMDG CODE Amendment 37-14, 2.10.2.7)

**ICAO/IATA:** May be shipped as NON-RESTRICTED in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less. (IATA Dangerous Goods Regulation 56<sup>th</sup> edition, 4.4 Special Provisions A197)

**ADR:** Classification code M6 Tunnel restriction code (E)

May be shipped as NON-RESTRICTED in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less. (ADR 2015 Volume 1, Chapter 3.3 Special Provisions 375)

**SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU regulations**

**Authorisations under Title VII:** Not applicable

**Restrictions under Title VIII:** None

**Other EU regulations:** Directive 94/33/EC on the protection of young people at work. Directive 92/85/EEC on the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

**15.1.2. National regulations****US EPA SARA TITLE III****312 Hazards:**

Acute toxicity  
 Skin irritation  
 Serious eye damage  
 Skin sensitization  
 Acute toxicity  
 Reproductive toxicity  
 Reproductive toxicity  
 Specific target organ toxicity – repeated exposure

**313 Chemicals:**

Bisphenol A	80-05-7	3-7%
Nonylphenol	84852-15-3	1-5%

**Other national regulations:** National implementation of the EC Directives referred to in section 15.1.1.  
 DSL: Included on Inventory

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**SECTION 16: OTHER INFORMATION**

<b>Abbreviations and acronyms:</b>	<p>ADG: Australian Dangerous Goods Code  ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road  ATE: Acute Toxicity Estimate  BCF: Bioconcentration Factor  cATpE: Converted Acute Toxicity point Estimate  CLP: Classification Labelling Packaging Regulation (1272/2008/EC)  ES: Exposure Standard  GHS: Globally Harmonized System  ICAO: International Civil Aviation Organization  IMDG: International Maritime Dangerous Goods  LC50: Lethal Concentration to 50 % of a test population  LD50: Lethal Dose to 50% of a test population  LOEL: Lowest Observed Effect Level  N/A: Not Applicable  NA: Not Available  NOEC: No Observed Effect Concentration  NOEL: No Observed Effect Level  OECD: Organization for Economic Co-operation and Development  PBT: Persistent, Bioaccumulative and Toxic substance  (Q)SAR: Quantitative Structure-Activity Relationship  REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (1907/2006/EC)  REL: Recommended Exposure Limit  RID: Regulations concerning the International Carriage of Dangerous Goods by Rail  SDS: Safety Data Sheet  STEL: Short Term Exposure Limit  STOT RE: Specific Target Organ Toxicity, Repeated Exposure  STOT SE: Specific Target Organ Toxicity, Single Exposure  TDG: Transportation of Dangerous Goods (Canada)  TWA: Time Weighted Average  US DOT: United States Department of Transportation  vPvB: very Persistent and very Bioaccumulative substance  WEL: Workplace Exposure Limit  WHMIS: Workplace Hazardous Materials Information System  Other abbreviations and acronyms can be looked up at <a href="http://www.wikipedia.org">www.wikipedia.org</a>.</p>
<b>Key literature references and sources for data:</b>	<p>Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)  Chemical Classification and Information Database (CCID)  European Chemicals Agency (ECHA) - Information on Chemicals  Hazardous Chemical Information System (HCIS)  National Institute of Technology and Evaluation (NITE)  Swedish Chemicals Agency (KEMI)  U.S. National Library of Medicine Toxicology Data Network (TOXNET)</p>

**Procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 [CLP]:**

Classification	Classification procedure
Acute Tox. 4, H302	Calculation method
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Bridging principle "Dilution"
Skin Sens. 1, H317	Calculation method
Acute Tox. 3, H331 (mist)	Calculation method
Repr. 1B, H360F	Bridging principle "Dilution"
Repr. 2, H361d	Bridging principle "Dilution"
STOT RE 2, H373 (oral)	Calculation method

**Relevant H-statements:** H302: Harmful if swallowed.  
H312: Harmful in contact with skin.  
H314: Causes severe skin burns and eye damage.  
H317: May cause an allergic skin reaction.  
H318: Causes serious eye damage.  
H330: Fatal if inhaled.  
H332: Harmful if inhaled.  
H335: May cause respiratory irritation.  
H360F: May damage fertility.  
H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.  
H373: May cause damage to organs through prolonged or repeated exposure.  
H400: Very toxic to aquatic life.  
H410: Very toxic to aquatic life with long lasting effects.  
H411: Toxic to aquatic life with long lasting effects.  
H412: Harmful to aquatic life with long lasting effects.

**Hazard pictogram names:** Corrosion, skull and crossbones, health hazard, environment

**Date of last revision:** 17 December 2018

**Changes to the SDS in this revision:** Sections 2.1, 8.1, 8.2.2, 15.1.2.

**Further information:** None

This information is based solely on data provided by suppliers of the materials used, not on the mixture itself. No warranty is expressed or implied regarding the suitability of the product for the user's particular purpose. The user must make their own determination as to suitability.