

## 1. Product and Company Identification

<b>Product identifier</b>	<b>Pool Perfect Total</b>
<b>Other means of identification</b>	Not available
<b>Recommended use</b>	Pool Water Treatment
<b>Recommended restrictions</b>	None known.
<b>Manufacturer information</b>	NC Brands 40 Richards Ave. Norwalk, CT 06854 US Phone: (800) 753-1233 Emergency Phone: CHEMTREC (800) 424-9300
<b>Supplier</b>	See above.

## 2. Hazards Identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2
<b>Environmental hazards</b>	Not classified.	
<b>WHMIS 2015 defined hazards</b>	Not classified	
<b>Label elements</b>		



<b>Signal word</b>	Warning	
<b>Hazard statement</b>	Causes serious eye irritation.	
<b>Precautionary statement</b>		
<b>Prevention</b>	Wash thoroughly after handling. Wear eye protection/face protection.	
<b>Response</b>	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.	
<b>Storage</b>	Store away from incompatible materials.	
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.	
<b>WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)</b>	None known	
<b>WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)</b>	None known	
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.	
<b>Supplemental information</b>	Not applicable.	

## 3. Composition/Information on Ingredients

**Mixture**

Chemical name	Common name and synonyms	CAS number	%
Aluminum chlorhydrate		12042-91-0	5
Lanthanum Chloride (IaCl <sub>3</sub> ), Hydrate		20211-76-1	5
Alcohols, C9-11, ethoxylated		68439-46-3	2

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First Aid Measures

<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.

<b>Eye contact</b>	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.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Avoid contact with eyes and skin. Wear rubber gloves and safety glasses with side shields. Keep out of reach of children.

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## 5. Fire Fighting Measures

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<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	May include and are not limited to: Hydrogen chloride. Oxides of carbon.

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## 6. Accidental Release Measures

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<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop the flow of material, if this is without risk.  Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

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## 7. Handling and Storage

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<b>Precautions for safe handling</b>	Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

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## 8. Exposure Controls/Personal Protection

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### Occupational exposure limits

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	2 mg/m3

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value	Form
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	1 mg/m3	Respirable.

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value	Form
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	1 mg/m3	Respirable fraction.

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	1 mg/m3	Respirable fraction.

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	2 mg/m3

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	1 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	2 mg/m3

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL.
<b>Appropriate engineering controls</b>	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.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	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.

**9. Physical and Chemical Properties**

<b>Appearance</b>	Liquid
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid
<b>Color</b>	Amber
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	2 - 5
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	1 - 1.1
<b>Partition coefficient (n-octanol/water)</b>	Not available.

<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Complete
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	8.00 - 9.00

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## 10. Stability and Reactivity

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<b>Reactivity</b>	May react with strong bases or oxidizing agents.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Hydrogen chloride.

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## 11. Toxicological Information

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<b>Routes of exposure</b>	Inhalation. Eye contact. Skin contact. Ingestion.
<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	Expected to be a low ingestion hazard.
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	May cause irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### Information on toxicological effects

#### Acute toxicity

Components	Species	Test Results
Alcohols, C9-11, ethoxylated (CAS 68439-46-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	2216 mg/kg, 24 Hours, ECHA
		2000 mg/kg, 24 Hours
	Rat	> 5000 mg/kg, HMIRA
		> 2000 mg/kg, 24 Hours
<i>Inhalation</i>		
LC50	Rat	> 1600 mg/m <sup>3</sup> , 4 Hours
		> 100 mg/m <sup>3</sup> , 6 hours, ECHA
		> 20 mg/L, 1 hours, Shell

Components	Species	Test Results
		> 1.6 mg/L, 4 Hours
<i>Oral</i> LD50	Rat	4600 mg/kg, ECHA 3488 mg/kg, ECHA 1400 mg/kg, Air products 1378 mg/kg, SAX
Aluminum chlorhydrate (CAS 12042-91-0)		
<b>Acute</b>		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg, ECHA
	Rat	> 2000 mg/kg, 21 Days > 2000 mg/kg, 24 Hours
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Rat	> 2000 mg/kg, ECHA, male rat 9187 mg/kg, ECHA, female rat
Lanthanum Chloride (lacl3), Hydrate (CAS 20211-76-1)		
<b>Acute</b>		
<i>Dermal</i> LD50	Not available	
<i>Inhalation</i> LC50	Not available	
<i>Oral</i> LD50	Rat	4184 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Exposure minutes</b>	Not available.	
<b>Erythema value</b>	Not available.	
<b>Oedema value</b>	Not available.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.	
<b>Corneal opacity value</b>	Not available.	
<b>Iris lesion value</b>	Not available.	
<b>Conjunctival reddening value</b>	Not available.	
<b>Conjunctival oedema value</b>	Not available.	
<b>Recover days</b>	Not available.	
<b>Respiratory or skin sensitization</b>		
<b>Canada - Alberta OELs: Irritant</b>		
Aluminum chlorhydrate (CAS 12042-91-0)		Irritant
<b>Respiratory sensitization</b>	Not available.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>Canada - Manitoba OELs: carcinogenicity</b>		
ALUMINUM METAL AND INSOLUBLE COMPOUNDS, RESPIRABLE FRACTION (CAS 12042-91-0)		Not classifiable as a human carcinogen.
SUCROSE (CAS 57-50-1)		Not classifiable as a human carcinogen.
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not listed.		
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Teratogenicity</b>	Not available.	

<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not available.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

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## 12. Ecological Information

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**Ecotoxicity** See below

### Ecotoxicological data

Components	Species	Test Results
Alcohols, C9-11, ethoxylated (CAS 68439-46-3)		
Fish	Rainbow Trout	70.7 mg/L, 96 Hours
<b>Aquatic</b>		
Crustacea	EC50 Water flea (Daphnia magna)	2.9 - 8.5 mg/L, 48 hours
Fish	LC50 Fathead minnow (Pimephales promelas)	6 - 12 mg/L, 96 hours

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Mobility in general** Not available.

**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.

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## 13. Disposal Considerations

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**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. 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).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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## 14. Transport Information

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**Transport of Dangerous Goods (TDG) Proof of Classification** In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.

### U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

### Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

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## 15. Regulatory Information

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**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

### Export Control List (CEPA 1999, Schedule 3)

Not listed.

### Greenhouse Gases

Not listed.

### Precursor Control Regulations

Not regulated.

**WHMIS 2015 Exemptions** Not applicable

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Diethylene glycol monoethyl ether (CAS 111-90-0) Listed.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
 Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Diethylene glycol monoethyl ether (CAS 111-90-0)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**US state regulations****US - California Hazardous Substances (Director's): Listed substance**

Aluminum chlorhydrate (CAS 12042-91-0) Listed.

**US - Illinois Chemical Safety Act: Listed substance**

Diethylene glycol monoethyl ether (CAS 111-90-0)

**US - Louisiana Spill Reporting: Listed substance**

Diethylene glycol monoethyl ether (CAS 111-90-0) Listed.

**US - Minnesota Haz Subs: Listed substance**

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1) Listed.

Aluminum chlorhydrate (CAS 12042-91-0) Listed.

Diethylene glycol monoethyl ether (CAS 111-90-0) Listed.

**US - New Jersey RTK - Substances: Listed substance**

Diethylene glycol monoethyl ether (CAS 111-90-0)

**US - Texas Effects Screening Levels: Listed substance**

1,2-Ethanediamine, polymer with (chloromethyl)oxirane and N-methylmethanamine (CAS 42751-79-1) Listed.

Alcohols, C9-11, ethoxylated (CAS 68439-46-3) Listed.

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1) Listed.

Aluminum chlorhydrate (CAS 12042-91-0) Listed.

Diethylene glycol monoethyl ether (CAS 111-90-0) Listed.

**US. Massachusetts RTK - Substance List**

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)

**US. New Jersey Worker and Community Right-to-Know Act**

Diethylene glycol monoethyl ether (CAS 111-90-0)

**US. Pennsylvania Worker and Community Right-to-Know Law**

alpha-D-Glucopyranoside, beta-D-fructofuranosyl (CAS 57-50-1)

Aluminum chlorhydrate (CAS 12042-91-0)

Diethylene glycol monoethyl ether (CAS 111-90-0)

**US. Rhode Island RTK**

Diethylene glycol monoethyl ether (CAS 111-90-0)

**US. California Proposition 65**

Not Listed.

**Inventory status**

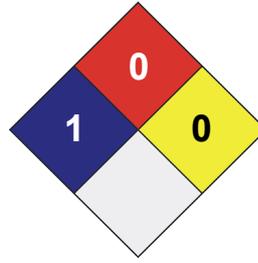
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## 16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



### Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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09-March-2017

### Version #

01

### Effective date

09-March-2017

### Prepared by

Dell Tech Laboratories Ltd. Phone: (519) 858-5021

### Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.