SAFETY DATA SHEET



1. Product and Company Identification

Product identifier Evap Pow'R C (4168-08, 4168-05, 4168-01)

Other means of identification

Not available

Recommended use

Evaporator Coil Cleaner

Recommended restrictions

None known. Nu-Calgon

Manufacturer

2008 Altom Court St. Louis, MO 63146 US

Phone: 314-469-7000 / 800-554-5499

Emergency Phone: 1-800-424-9300 (CHEMTREC)

2. Hazards Identification

Physical hazards Not classified.

Health hazards Acute toxicity, dermal Category 4

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2

Environmental hazards OSHA defined hazards

Not classified. Not classified.

Label elements



Signal word Warning

Hazard statement Harmful in contact with skin.

Causes skin irritation.

Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling.

Wear protective gloves/protective clothing.

Wear eye/face protection.

Response If on skin: Wash with plenty of water. Call a poison center/doctor if you feel unwell. If skin irritation

occurs: Get medical advice/attention. Specific treatment (see this label). Take off contaminated

clothing and wash it before reuse.

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.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

1% of the mixture consists of component(s) of unknown acute oral toxicity. 91% of the mixture consists of component(s) of unknown acute inhalation toxicity.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Ethanol, 2-butoxy-		111-76-2	3 - 7
Sodium xylene sulphonate		1300-72-7	3 - 7
Alcohols, C7-21, ethoxylated		68991-48-0	1 - 5

Composition comments

US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. First Aid Measures

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

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Skin contact If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off

contaminated clothing and wash it before reuse. Specific treatment (see product label). Call a

poison center/doctor if you feel unwell.

If in eves: Rinse cautiously with water for several minutes, Remove contact lenses, if present and Eye contact

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Rinse mouth. Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is Ingestion

convulsing. Obtain medical attention.

Skin irritation. May cause redness and pain.

Most important

symptoms/effects, acute and

delayed

Indication of immediate

medical attention and special

Treat patient symptomatically.

treatment needed

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wash

contaminated clothing before reuse. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide.

Not available

Specific hazards arising from

the chemical

Firefighters should wear a self-contained breathing apparatus.

Special protective equipment and precautions for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Fire-fighting

equipment/instructions

Move containers from fire area if you can do so without risk.

No unusual fire or explosion hazards noted.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

Hazardous combustion

products

May include and are not limited to: Oxides of carbon. Oxides of sulfur.

Explosion data

Sensitivity to mechanical

impact

Not available.

Sensitivity to static

discharge

Not available.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak. Keep out of low areas. 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.

Methods and materials for containment and cleaning up

Stop leak if you can do so without risk. 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. Never return spills to original containers for re-use. Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions

Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Avoid contact with eyes, skin and clothing. Precautions for safe handling

Avoid breathing vapors or mists of this product. Wear appropriate personal protective equipment.

Use only with adequate ventilation.

Observe good industrial hygiene practices.

Wash thoroughly after handling. When using do not eat or drink.

Conditions for safe storage, including any incompatibilities Store in a closed container. Store away from incompatible materials (see Section 10 of the SDS).

Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	
Ethanol, 2-butoxy- (CAS 111-76-2)	PEL	240 mg/m3	
·		50 ppm	
US. ACGIH Threshold Limit Value	es		
Components	Туре	Value	
Ethanol, 2-butoxy- (CAS 111-76-2)	TWA	20 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
Ethanol, 2-butoxy- (CAS 111-76-2)	TWA	24 mg/m3	

Biological limit values

Components	Value	Determinant	Specimen	Sampling Time
Ethanol, 2-butoxy- (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

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

Exposure guidelines Chemicals listed in section 3 that are not listed here do not have established limit values for

ACGIH or OSHA PEL.

Appropriate engineering

controls

Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields. Eye/face protection

Skin protection

Rubber gloves. Confirm with a reputable supplier first. Hand protection

As required by employer code. Other

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respiratory protection

Thermal hazards Not applicable.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. When using do not eat or drink.

5 ppm

9. Physical and Chemical Properties

Clear Appearance Liquid. Physical state **Form** Liquid Green Color butyl Odor **Odor threshold**

Not available. 7.9 (Concentrate) Not available. Melting point/freezing point Initial boiling point and boiling Not available.

range

Not available. Pour point Not available. Specific gravity **Partition coefficient** Not available (n-octanol/water)

Not available Flash point Not available **Evaporation rate** Flammability (solid, gas) Not applicable.

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Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available

Flammability limit - upper

(%)

Not available

Explosive limit - lower (%) No Explosive limit - upper (%) No

Not available.

Not available.

Vapor pressure

Not available

Vapor density Relative density Not available
Not available.

Solubility(ies)
Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

Not available

Other information

Percent volatile

10. Stability and Reactivity

Reactivity

Viscosity

May react with incompatible materials.

Possibility of hazardous

Hazardous polymerization does not occur.

reactions

Tiazardous polymenzation does not occur.

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid Incompatible materials

Do not mix with other chemicals.

Strong evidizing agents. Acids

Hazardous decomposition

Strong oxidizing agents. Acids.

products

May include and are not limited to: Oxides of carbon. Oxides of sulfur.

11. Toxicological Information

Routes of exposure

Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

Information on likely routes of exposure

Ingestion

Expected to be a low ingestion hazard. May cause stomach distress, nausea or vomiting.

Inhalation

Prolonged inhalation may be harmful.

Skin contact

Harmful in contact with skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

US. NIOSH: Pocket Guide to Chemical Hazards

Ethanol, 2-butoxy- (CAS 111-76-2)

Can be absorbed through the skin.

Eye contact

Causes serious eye irritation.

Symptoms related to the physical, chemical and

Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Skin irritation. May cause redness and pain.

toxicological characteristics

Information on toxicological effects

Acute toxicity Harmful in contact with skin.

Components Species Test Results

1-Dodecanamine, N,N-dimethyl-,N-oxide (CAS 1643-20-5)

Acute

Dermal

LD50 Not available

Inhalation

LC50 Not available

Oral

LD50 Mouse 2700 mg/kg

Test Results Components **Species** Alcohols, C7-21, ethoxylated (CAS 68991-48-0) Acute Dermal LD50 Rabbit > 2000 mg/kg Inhalation LC50 Not available Oral LD50 Rat 1410 mg/kg Ethanol, 2-butoxy- (CAS 111-76-2) Acute Dermal LD50 Guinea pig 207 mg/kg Rabbit 400 mg/kg 220 mg/kg 99 mg/kg Rat 99 mg/kg Inhalation LC50 Mouse 700 ppm, 7 Hours Rat 450 ppm, 4 Hours 2.2 mg/L, 4 Hours Oral LD50 Guinea pig 1200 mg/kg Mouse 1200 mg/kg Rabbit 320 mg/kg Rat 470 mg/kg Sodium xylene sulphonate (CAS 1300-72-7) **Acute**

Dermal

LD50 Not available

Inhalation

LC50 Rat 557 mg/l/4h

Oral

LD50 Rat 6500 mg/kg

Skin corrosion/irritation Causes skin irritation.

Exposure minutesNot available.Erythema valueNot available.Oedema valueNot available.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Corneal opacity value Not available.

Iris lesion value Not available.

Conjunctival reddening Not available.

value

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

US. NIOSH: Pocket Guide to Chemical Hazards

Ethanol, 2-butoxy- (CAS 111-76-2)

Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Ethanol, 2-butoxy- (CAS 111-76-2)

Can be absorbed through the skin.

Germ cell mutagenicity Not classified.

Mutagenicity Not classified. Carcinogenicity See below.

ACGIH Carcinogens

Ethanol, 2-butoxy- (CAS 111-76-2) A3 Confirmed animal carcinogen with unknown relevance to

humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethanol, 2-butoxy- (CAS 111-76-2) Volume 88 - 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Not classified. **Teratogenicity** Not classified. Specific target organ toxicity -Not classified.

single exposure

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not classified.

Chronic effects Prolonged inhalation may be harmful.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

Further information Name of Toxicologically Synergistic Products

Not available. Not available.

12. Ecological Information

Ecotoxicity	See below		
Components		Species	Test Results
Ethanol, 2-butoxy- (CAS 111	-76-2)		
Crustacea	EC50	Daphnia	1819 mg/L, 48 Hours
Aquatic			
Fish	LC50	Inland silverside (Menidia beryllina)	1250 mg/L, 96 hours
Persistence and degradability	No data is ava	ilable on the degradability of this product.	
Bioaccumulative potential	No data available.		
Mobility in soil	Modata 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.		
13. Disposal Considerations			

Disposal instructions Local disposal regulations Hazardous waste code

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

The waste code should be assigned in discussion between the user, the producer and the waste

Dispose in accordance with all applicable regulations.

disposal company.

Waste from residues / unused products

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.

14. Transport Information

General

Canada: 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. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products

Regulations.

Canada CEPA Schedule I: Listed substance

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Ethanol, 2-butoxy- (CAS 111-76-2) 1 TONNES

Canada Priority Substances List (Second List): Listed substance

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

Canada WHMIS Ingredient Disclosure: Threshold limits

1-Dodecanamine, N,N-dimethyl-,N-oxide (CAS 1 %

1643-20-5)

Ethanol, 2-butoxy- (CAS 111-76-2) 1 %

WHMIS status Controlled

WHMIS classification Class D - Division 2B

WHMIS labeling



US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Ethanol, 2-butoxy- (CAS 111-76-2) 1.0 % N230

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Ethanol, 2-butoxy- (CAS 111-76-2) Listed. N230

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

US CAA Section 111 Volatile Organic Compounds: Listed substance

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

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

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

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 No

hazardous substance

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical nameCAS number% by wt.Ethanol, 2-butoxy-111-76-23 - 7

Other federal regulations

Safe Drinking Water Act Not regulated.

(SDWA)

Food and Drug Not regulated.

Administration (FDA)

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth

defects or other reproductive harm.

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

Ethanol, 2-butoxy- (CAS 111-76-2) Listed

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US - Illinois Chemical Safety Act: Listed substance

Ethanol, 2-butoxy- (CAS 111-76-2)

US - Louisiana Spill Reporting List: Reportable quantity (total mass into atmosphere)

Ethanol, 2-butoxy- (CAS 111-76-2) 100 LBS

US - Louisiana Spill Reporting: Listed substance

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

US - Minnesota Haz Subs: Listed substance

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

US - New Jersey RTK - Substances: Listed substance

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

US - Texas Effects Screening Levels: Listed substance

1-Dodecanamine, N,N-dimethyl-,N-oxide (CAS

1643-20-5)

Ethanol, 2-butoxy- (CAS 111-76-2) Listed. Sodium xylene sulphonate (CAS 1300-72-7) Listed.

US. Massachusetts RTK - Substance List

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

US. Pennsylvania RTK - Hazardous Substances

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

US. Rhode Island RTK

Ethanol, 2-butoxy- (CAS 111-76-2) Listed.

Inventory status

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

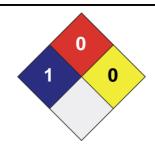
Listed.

Listed.

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer

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.

Issue date22-September-2015Effective date22-September-2015Expiry date22-September-2018

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

document.

Prepared by Nu-Calgon Technical Service Phone: (314) 469-7000

Other information This Safety Data Sheet was prepared to comply with the current OSHA Hazard Communication

Standard (HCS) adoption of the Globally Harmonized System of Classification and Labeling of

Chemicals (GHS).

This SDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.

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