

SAFETY DATA SHEET

1. Product and Company Identification

le Coil Cleaner n. Court 10 63146 US -469-7000 / 800-554-5499 Phone: 1-800-424-9300 (CH 2. Hazards Identific ed. ity, dermal ion/irritation e damage/eye irritation	
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Court 10 63146 US -469-7000 / 800-554-5499 ⁹ Phone: 1-800-424-9300 (CH 2. Hazards Identific ed. ity, dermal ion/irritation	ation
10 63146 US 1-469-7000 / 800-554-5499 2 Phone: 1-800-424-9300 (CH 2. Hazards Identific ed. ity, dermal ion/irritation	ation
ed. ity, dermal ion/irritation	
ity, dermal ion/irritation	Category 4
ion/irritation	Category 4
amage/eye irritation	Category 2
	Category 2
ed.	
ed.	
contact with skin.	
in irritation. rious eye irritation.	
oughly after handling. ctive gloves/protective clothin ace protection.	ng.
t medical advice/attention. Sp d wash it before reuse. Rinse cautiously with water for	Il a poison center/doctor if you feel unwell. If skin irritation becific treatment (see this label). Take off contaminated r several minutes. Remove contact lenses, if present and tion persists: Get medical advice/attention.
from incompatible materials.	
contents/container in accorda	ance with local/regional/national/international regulations.
n.	
	t(s) of unknown acute oral toxicity. nt(s) of unknown acute inhalation toxicity.
/	Continue rinsing. If eye irritat r from incompatible materials. contents/container in accorda n. nixture consists of componen

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) secret in accordance with paragraph (i) of §1910		withheld as a trade
	4. First Aid Measures		

Inhalation

Precautions for safe handling	Avoid contact with eyes, skin and clothing.		
•	7. Handling and Storage		
Environmental precautions	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. Do not discharge into lakes, streams, ponds or public waters.		
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		
protective equipment and emergency procedures	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.		
Personal precautions,	Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged		
	6. Accidental Release Measures		
Sensitivity to static discharge	Not available.		
Explosion data Sensitivity to mechanical impact	Not available.		
products	, ,		
Hazardous combustion	May include and are not limited to: Oxides of carbon. Oxides of sulfur.		
Specific methods General fire hazards	Use standard firefighting procedures and consider the hazards of other involved materials. No unusual fire or explosion hazards noted.		
equipment/instructions	Move containers from fire area if you can do so without risk.		
and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.		
the chemical Special protective equipment			
media Specific hazards arising from	Firefighters should wear a self-contained breathing apparatus.		
Unsuitable extinguishing	Not available.		
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.		
	5. Fire Fighting Measures		
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.		
Indication of immediate medical attention and special treatment needed	Treat patient symptomatically.		
Most important symptoms/effects, acute and delayed	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.		
Ingestion	Rinse mouth. Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.		
Eye contact	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.		
	contaminated clothing and wash it before reuse. Specific treatment (see product label). Call a poison center/doctor if you feel unwell.		

Avoid contact with eyes, skin and clothing.
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.
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	5			
US. OSHA Table Z-1 Limi	ts for Air Contaminants	(29 CFR 1910.10	00)	
Components	Туре			Value
Ethanol, 2-butoxy- (CAS 111-76-2)	PEL			240 mg/m3
				50 ppm
US. ACGIH Threshold Lir Components	nit Values Type			Value
•	••			
Ethanol, 2-butoxy- (CAS 111-76-2)	TWA			20 ppm
US. NIOSH: Pocket Guide	e to Chemical Hazards			
Components	Туре			Value
Ethanol, 2-butoxy- (CAS 111-76-2)	TWA			24 mg/m3
				5 ppm
iological limit values				
ACGIH Biological Expose Components	ure Indices Value	Determinant	Specimen	Sampling Time
Ethanol, 2-butoxy- (CAS	200 mg/g	Butoxyacetic	Creatinine	*
111-76-2)	200 mg/g	acid (BAA), with hydrolysis	in urine	
* - For sampling details, pl	ease see the source docu	iment.		
xposure guidelines	Chemicals listed in s ACGIH or OSHA PE		not listed here	do not have established limit values for
Appropriate engineering controls	Ensure adequate ve	ntilation.		
ndividual protection measur	es, such as personal pro	otective equipme	nt	
Eye/face protection	Wear safety glasses	with side shields.		
Skin protection				
Hand protection	Rubber gloves. Cor	nfirm with a reputa	ble supplier fir	st.
Other	As required by empl	oyer code.		
Respiratory protection	Where exposure gui	ideline levels may	be exceeded,	use an approved NIOSH respirator.
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.		
	9. Physica	al and Chemic	al Properti	es
Appearance	Clear		-	

Appearance	Clear
Physical state	Liquid.
Form	Liquid
Color	Green
Odor	butyl
Odor threshold	Not available.
рН	7.9 (Concentrate)
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Upper/lower flammability or exp	plosive limits		
Flammability limit - lower (%)	Not available		
Flammability limit - upper (%)	Not available		
Explosive limit - lower (%)	Not available.		
Explosive limit - upper (%)	Not available.		
Vapor pressure	Not available		
Vapor density	Not available		
Relative density	Not available.		
Solubility(ies)	Not available.		
Auto-ignition temperature	Not available		
Decomposition temperature	Not available.		
Viscosity	Not available.		
Other information Percent volatile	Not available		
	10. Stability and Reactivity		
Reactivity	May react with incompatible materials.		
Possibility of hazardous reactions	Hazardous polymerization does not occur.		
Chemical stability	Stable under recommended storage conditions.		
Conditions to avoid	Do not mix with other chemicals.		
Incompatible materials	Strong oxidizing agents. Acids.		
Hazardous decomposition 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 e	-		
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 repea prolonged. These effects have not been observed in humans.	ited and	
US. NIOSH: Pocket Gui	ide 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 toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.		
Information on toxicological effe	ects		
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

Oral LD50 Not available

Mouse

Components	Species	Test Results
Alcohols, C7-21, ethoxylated (CAS	68991-48-0)	
Acute		
Dermal LD50	Rabbit	> 2000 mg/kg
Inhalation	Rabbit	> 2000 mg/kg
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 13		
Acute	000 12 1)	
Dermal		
LD50	Not available	
Inhalation		
LC50	Rat	557 mg/l/4h
Oral		
LD50	Rat	6500 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not 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	o cause skin sensitization.
US. NIOSH: Pocket Guid		
Ethanol, 2-butoxy- (C		Can be absorbed through the skin.
US. NIOSH: Pocket Guid		
Ethanol, 2-butoxy- (C		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 - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not classified.	
Chronic effects	Prolonged inhalation may be h	narmful.
		brbed through the skin in toxic amounts if contact is repeated and e not been observed in humans.
Further information	Not available.	
Name of Toxicologically Synergistic Products	Not available.	
	12. Ecologic	al Information

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 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.			
		13. Disposal Considerations		
Disposal instructions 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	d 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	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 emptied.			
		14. Transport Information		

See below

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 Transportati Not regulated as dangerous g	

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

Ecotoxicity

	15. Regula	tory Information	n	
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: L	isted substance			
Ethanol, 2-butoxy- (CAS Canada NPRI VOCs with Ad		Listed. Ients: Mass reporti	ng threshold/Identification Number	
Ethanol, 2-butoxy- (CAS Canada Priority Substances	s List (Second List): Listed s	1 TONNES ubstance		
Ethanol, 2-butoxy- (CAS Canada WHMIS Ingredient I	Disclosure: Threshold limits	Listed.		
1-Dodecanamine, N,N-di 1643-20-5) Ethanol, 2-butoxy- (CAS		1 % 1 %		
WHMIS status	Controlled	1 70		
WHMIS classification	Class D - Division 2B			
WHMIS labeling				
	This product is a "Hozordou	o Chomicol" oo dofir	and by the OSHA Hazard Communication	
US federal regulations	Standard, 29 CFR 1910.120	00.	ned by the OSHA Hazard Communication	
US EPCRA (SARA Title III) S			entration	
Ethanol, 2-butoxy- (CAS		1.0 % N230		
US EPCRA (SARA Title III) S				
Ethanol, 2-butoxy- (CAS TSCA Section 12(b) Export		Listed. N230 bpt. D)		
Not regulated.	unan Lint (40 CER 202 4)			
CERCLA Hazardous Substa Ethanol, 2-butoxy- (CAS US CAA Section 111 Volatile	111-76-2)	Listed.		
Ethanol, 2-butoxy- (CAS	111-76-2)	Listed.		
Clean Air Act (CAA) Sectior Not regulated.		·	68.130)	
	112 Hazardous Air Pollutar	nts (HAPs) List		
Not regulated.				
Superfund Amendments and Re Hazard categories	authorization Act of 1986 (S Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	ARA)		
SARA 302 Extremely hazardous substance	No			
SARA 311/312 Hazardous chemical	No			
SARA 313 (TRI reporting) Chemical name		CAS number	% by wt.	
Ethanol, 2-butoxy-		111-76-2	3 - 7	
Other federal regulations Safe Drinking Water Act (SDWA)	Not regulated.			
Food and Drug Administration (FDA)	Not regulated.			
US state regulations	This product does not conta defects or other reproductiv		n to the State of California to cause cancer, birth	
US - California Hazardo	us Substances (Director's):			
Ethanol, 2-butoxy- (Listed.	(CRT): Listed substance	

	al Safety Act: Listed substance				
	Ethanol, 2-butoxy- (CAS 111-76-2) Listed. US - Louisiana Spill Reporting List: Reportable quantity (total mass into atmosph				
		100 LBS	pnere)		
	Ethanol, 2-butoxy- (CAS 111-76-2)				
•	Reporting: Listed substance	Listed.			
	Ethanol, 2-butoxy- (CAS 111-76-2)				
US - Minnesota Haz	Subs: Listed substance				
-	Ethanol, 2-butoxy- (CAS 111-76-2)				
US - New Jersey RT	K - Substances: Listed substan	ice			
Ethanol, 2-butoxy	Ethanol, 2-butoxy- (CAS 111-76-2)				
US - Texas Effects S	creening Levels: Listed substa	ince			
1-Dodecanamine 1643-20-5)	1-Dodecanamine, N,N-dimethyl-,N-oxide (CAS 1643-20-5)				
Ethanol, 2-butoxy	Ethanol, 2-butoxy- (CAS 111-76-2)				
Sodium xylene su	Sodium xylene sulphonate (CAS 1300-72-7)				
US. Massachusetts	RTK - Substance List				
Ethanol, 2-butoxy	Ethanol, 2-butoxy- (CAS 111-76-2)				
US. Pennsylvania R	FK - Hazardous Substances				
Ethanol, 2-butoxy	Ethanol, 2-butoxy- (CAS 111-76-2)				
US. Rhode Island RT	ſĸ				
Ethanol, 2-butoxy	Ethanol, 2-butoxy- (CAS 111-76-2)				
Inventory status					
Country(s) or region	Inventory name		On inventory (yes/no)*		
Canada	Domestic Substances List (DSL)	Yes		
Canada	Nen Demestie Culestenese		Na		

Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
*A "Yes" indicates that all compon	ents of this product comply with the inventory requirements administered by the governing country(s)	

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Disclaimer

HEALTH / 1	
PHYSICAL HAZARD 0	
PERSONAL PROTECTION X	

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 date	22-September-2015
Effective date	22-September-2015
Expiry date	22-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.

16. Other Information	l
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