

Vers 3.4	sion	Revision Date: 06/23/2024		0S Number: 007035-00006	Date of last issue: 11/10/2022 Date of first issue: 08/22/2017
SEC	CTION 1	. IDENTIFICATION			
	Produc	t name	:	ECO ALUMINUM	BRIGHTENER, Ready-to-use, 1 L
	Produc	t code	:	893.162810	
	Other r	neans of identification	:	No data available	
	Manuf	acturer or supplier's o	leta	iils	
	Compa	any name of supplier	:	Würth Canada Lir	nited
	Addres	s	:	345 Hanlon Creek GUELPH, ON N1	
	Teleph	one	:	+1 (905) 564 622	5
	Telefax	K	:	+1 (905) 564 367	1
	Emerg	ency telephone	:	CHEMTREC (24/ Transport related	llving a spill, fire, explosion or exposure: 7): 1-800-424-9300 emergencies: : 1-613-996-6666 or * 666 (cell)
				exposition: CHEMTREC (24/ Urgences liées au	ant un déversement, incendie, explosion ou 7): 1-800-424-9300 I transport: : 1-613-996-6666 ou * 666 (cellulaire)
	E-mail	address	:	prodsafe@wurth.	ca
	Recon	nmended use of the c	hen	nical and restriction	ons on use
	Recom	mended use	:	Cleansing agents	, acidic.
	Restric	tions on use	:	Not applicable	

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations
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Acute toxicity (Oral)	:	Category 4
Skin corrosion	:	Category 1
Serious eye damage	:	Category 1

Serious eye damage	:	Category

GHS label elements



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Hazard pictograms Signal Word Hazard Statements		•	
4 06/23/2024 Hazard pictograms Signal Word		: Danger	
Hazai	06/23/2024 Hazard pictograms Signal Word Hazard Statements	: H302 Harmful if H314 Causes so	swallowed. evere skin burns and eye damage.
Preca	utionary Statements	P270 Do not ea	n thoroughly after handling. t, drink or smoke when using this product. ective gloves, protective clothing, eye protectiv tion.
		Do NOT induce P303 + P361 + immediately all Immediately cal P304 + P340 + and keep comfo CENTER. P305 + P351 + water for severa and easy to do. CENTER.	 P331 + P310 IF SWALLOWED: Rinse mouth. vomiting. Immediately call a POISON CENTE P353 + P310 IF ON SKIN (or hair): Take off contaminated clothing. Rinse skin with water. I a POISON CENTER. P310 IF INHALED: Remove person to fresh ai ortable for breathing. Immediately call a POISO P338 + P310 IF IN EYES: Rinse cautiously with minutes. Remove contact lenses, if present Continue rinsing. Immediately call a POISON taminated clothing before reuse.
		Storage: P405 Store lock	ed up.
		Disposal:	
		P501 Dispose o disposal plant.	f contents and container to an approved waste
Othe	⁻ hazards		
	known.		

Substance / Mixture : Mixture

Components

Chemical name	Common Name/Synonyn	CAS-No. n	Concentration (% w/w)					
Acid Salt**	Trade secret	Trade secret**	>= 60 - < 80 *					
Actual concentration or concentration range is withheld on a trade concent								

Actual concentration or concentration range is withheld as a trade secret



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** See Section 15 for HMIRA information.

SECTION 4. FIRST AID MEASURES General advice In the case of accident or if you feel unwell, seek medical ad-: vice immediately. When symptoms persist or in all cases of doubt seek medical advice. If inhaled, remove to fresh air. If inhaled 5 If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately. In case of contact, immediately flush skin with plenty of water In case of skin contact for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse. In case of contact, immediately flush eyes with plenty of water In case of eye contact : for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention immediately. If swallowed If swallowed, DO NOT induce vomiting. : If vomiting occurs have person lean forward. Call a physician or poison control center immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Most important symptoms Harmful if swallowed. • and effects, both acute and Causes serious eye damage. Causes severe burns. delayed Causes digestive tract burns. Protection of first-aiders First Aid responders should pay attention to self-protection, 1 and use the recommended personal protective equipment

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	None known.

when the potential for exposure exists (see section 8).



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Specific hazards during fire fighting		:	Exposure to combustion products may be a hazard to healt					
Hazardous combustion prod- ucts		:	Nitrogen oxides (NOx) Carbon oxides Fluorine compounds					
	Specific extinguishing meth- ods			Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.				
	Special protective equipment for fire-fighters			In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.				
SEC	TION 6	ACCIDENTAL RELE	ASE	EMEASURES				
	Personal precautions, protec- tive equipment and emer- gency procedures			Use personal protective equipment. Follow safe handling advice (see section 7) and personal pro- tective equipment recommendations (see section 8).				
	Environmental precautions		:	 Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g., by containmen oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained. 				
	Methods and materials for containment and cleaning up		:	For large spills, pr ment to keep mate pumped, store rec Clean up remainin bent. Local or national r sal of this materia ployed in the clean which regulations Sections 13 and 1	absorbent material. ovide diking or other appropriate contain- erial from spreading. If diked material can be covered material in appropriate container. In a materials from spill with suitable absor- egulations may apply to releases and dispo- l, as well as those materials and items em- nup of releases. You will need to determine are applicable. 5 of this SDS provide information regarding tional requirements.			

SECTION 7. HANDLING AND STORAGE

Technical measures	: See Engineering measures under EXPOSURE
	CONTROLS/PERSONAL PROTECTION section.



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Loc	al/Total ventilation	÷	If sufficient ventila ventilation.	ation is unavailable, use with local exhaust
Adv	ice on safe handling	:	Do not get on ski Do not breathe va Do not swallow. Do not get in eye Wash skin thorou Handle in accord practice, based o sessment Keep container ti Do not eat, drink	apors or spray mist. s. Ighly after handling. ance with good industrial hygiene and safety n the results of the workplace exposure as-
Cor	ditions for safe storage	:	Store locked up. Keep tightly close Store in accordar Reacts with many form explosive m le gas, can accur	labeled containers. ed. nce with the particular national regulations. y metals to liberate hydrogen gas which can ixtures with air. Hydrogen, a highly flammab- nulate to explosive concentrations inside ses of steel containers or tanks upon storage.
Mat	erials to avoid	:	Strong oxidizing a	stances and mixtures

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Hydrofluoric acid	7664-39-3	TWA	0.5 ppm 0.4 mg/m ³ (Fluorine)	CA AB OEL
		(c)	2 ppm 1.6 mg/m ³ (Fluorine)	CA AB OEL
		С	2 ppm (Fluorine)	CA BC OEL

SAFETY DATA SHEET



according to the Hazardous Products Regulations

ECO ALUMINUM BRIGHTENER, Ready-to-use, 1 L

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			C	3 ppm 2.6 mg/m ³ (Fluorine)	CA QC O
			TWA	0.5 ppm (Fluorine)	ACGIH
			С	2 ppm (Fluorine)	ACGIH
Hydrogen	n cyanide	74-90-8	(c)	4.7 ppm 5.2 mg/m ³ (Cyanide)	CA AB O
			С	4.7 ppm (Cyanide)	CA BC O
			С	10 ppm 11 mg/m³ (Cyanide)	CA QC O
			С	4.7 ppm (Cyanide)	ACGIH
				unavailable, use with	
		ventilation	٦.		
	I protective equipr bry protection	nent : If adequa sure asse	te local exhaus	t ventilation is not ava strates exposures out use respiratory protec	side the re-
	bry protection	nent : If adequa sure asse comment	te local exhaus essment demon ded guidelines,		side the re- tion.
Respirato	tection	nent : If adequa sure asse comment	te local exhaus essment demon ded guidelines, d acidic and ino	strates exposures out use respiratory protec	side the re- tion.
Respirato Filter t Hand pro	type tection	 nent If adequa sure asse commend Combined Combined Nitrile rub Choose g on the co application micals of manufact workday. 	te local exhaus essment demon ded guidelines, d acidic and ino ber loves to protect ncentration spe ns, we recomm the aforementic urer. Wash han	strates exposures out use respiratory protec rganic gas/vapor type t hands against chemi cific to place of work. end clarifying the resi oned protective gloves ds before breaks and ime is not determined	side the re- tion. cals depending For special stance to che- s with the glove at the end of
Respirato Filter t Hand pro Materi	type tection ial	 If adequa sure asse commend Combined Combined Nitrile rub Choose g on the co application micals of manufact workday. duct. Cha Wear the Chemical 	te local exhaus essment demon ded guidelines, d acidic and ino ber loves to protect ncentration spe ns, we recomm the aforementio urer. Wash han Breakthrough t inge gloves ofte following perso resistant goggl s are likely to o	strates exposures out use respiratory protec rganic gas/vapor type t hands against chemi cific to place of work. end clarifying the resi oned protective gloves ds before breaks and ime is not determined en! nal protective equipm es must be worn.	side the re- tion. cals depending For special stance to che- with the glove at the end of for the pro-



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				clothing (gloves, a	aprons, boots, etc).		
	Hygiene measures		:	If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the wor- king place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.			
SEC	TION 9	. PHYSICAL AND CHE	ΞΜΙΟ		3		
	Appear	ance	:	liquid			
	Color		:	clear			
	Odor		:	characteristic			
	Odor T	hreshold	:	No data available	9		
	рН		:	0			
	Melting	point/freezing point	:	< -30 °C			
	Initial b range	oiling point and boiling	:	100 °C			
	Flash p	oint	:	No data available	9		
	Evapor	ation rate	:	No data available	9		
	Flamma	ability (solid, gas)	:	Not applicable			
	Flamma	ability (liquids)	:	No data available	9		
		explosion limit / Upper bility limit	:	No data available	9		
		explosion limit / Lower bility limit	:	No data available	9		
	Vapor p	pressure	:	No data available	9		
	Relative	e vapor density	:	No data available	9		
	Density	,	:	1.29 g/cm ³			
	Solubili Wat	ty(ies) er solubility	:	soluble			



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	ion coefficient: n- iol/water	: Not applicable	
Autoi	gnition temperature	: No data available	
Deco	mposition temperature	: No data available	
Visco Vi	osity scosity, kinematic	: No data available	
Explo	osive properties	: Not explosive	
	zing properties	: The substance or mixture	e is not classified as oxidizing.
	cle characteristics cle size	: Not applicable	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.	
Chemical stability	:	Stable under normal conditions.	
Possibility of hazardous reac- tions	:	Can react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures.	
Conditions to avoid	:	None known.	
Incompatible materials	:	Oxidizing agents Bases	
Hazardous decomposition products			

Thermal decomposition : Hydrofluoric acid

mermai decomposition	•	Hydronuone acid
		Hydrogen cyanide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Harmful if swallowed.



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	<u>Produ</u> Acute	i <u>ct:</u> oral toxicity	:	Acute toxicity esti Method: Calculation	mate: 968.57 mg/kg on method
	<u>Comp</u>	onents:			
	Acid S	Salt:			
	Acute	oral toxicity	:	LD50 (Rat): 678 n	ng/kg
		corrosion/irritation			
	<u>Comp</u>	onents:			
	Acid S	Salt:			
	Result	t	:	No skin irritation	
	Asses	sment	:	Repeated exposu	re may cause skin dryness or cracking.
	Cause	u s eye damage/eye i i es serious eye damage eonents:		on	
	Acid S Result		:	Irreversible effects	s on the eye
	Respi	ratory or skin sensit	izatio	on	
	Skin sensitization Not classified based on available information. Respiratory sensitization Not classified based on available information.				
		cell mutagenicity assified based on avai	lable	information.	
	<u>Comp</u>	onents:			
	Acid S Genot	Salt: oxicity in vitro	:	Test Type: Bacter Result: negative	ial reverse mutation assay (AMES)
		nogenicity assified based on avai	lable	information.	
	Repro	ductive toxicity			
	Not cla	assified based on avai	lable	information.	



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	Γ-single exposure					
Not c	lassified based on av	ailable information.				
	F-repeated exposure					
Not c	lassified based on av	ailable information.				
Aspi	ration toxicity					
Not c	lassified based on av	ailable information.				
No da	oxicity ata available					
	istence and degrada ata available	bility				
Bioa	ccumulative potentia	al				
No da	ata available					
Mobi	lity in soil					
No da	ata available					
Othe	r adverse effects					
No da	No data available					

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods		
Waste from residues	:	Do not dispose of waste into sewer.
		Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.



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Dom	estic regulation		
TDG Not re	egulated as a dangerous	good	
-	ial precautions for use pplicable	r	
BECTION	15. REGULATORY INF	ORMATION	
	ile organic compounds) content		VIRONMENTAL PROTECTION ACT, 1999 - 'OC in Consumer Products % / 0 g/l
The i	ngredients of this prod	luct are reported in	the following inventories:
NDSL	• •	•	ntains one or several components listed in the
Regis	stration: Trade secret		

Registration number	Registration
HMIRA No. 9207	Granted on 04/30/2014

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH CA AB OEL	:	USA. ACGIH Threshold Limit Values (TLV) Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA QC OEL	:	Québec. Regulation respecting occupational health and safe- ty, Schedule 1, Part 1: Permissible exposure values for air- borne contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / C	:	Ceiling limit
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA AB OEL / (c)	:	ceiling occupational exposure limit
CA BC OEL / C	:	ceiling limit
CA QC OEL / C	:	Ceiling

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemi-



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cal Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration: NO(A)EL - No Observed (Adverse) Effect Level: NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/
Revision Date Date format	:	06/23/2024 mm/dd/yyyy

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