

Safety data sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS





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

1.1	Product Identifier	Durazon CSB, CSG
	GHS Product Identifier	Durazon CSB, CSG
	Chemical Name	Mixture (Calcia-Stabilized Zirconium Oxide)
	Trade Name	See Product Identifier
	CAS No.	Mixture
	EINECS No.	Mixture
	REACH Registration No.	Not available
1.2	Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against	
	Application of the substance / the mixture	Product Component
1.3	Details Of The Supplier Of The Safety Data Sheet	
	Company Identification	Washington Mills
	Address	1801 Buffalo Avenue Niagara Falls, NY 14302
	Telephone	1-800-828-1666
	E-Mail (Competent Person)	info@washingtomills.com
1.4	Emergency Telephone Number – ChemTel (800)255-3924 (USA/Canada), 813-248-0585 (International)	

SECTION 2: HAZARDS IDENTIFICATION

2.1	Classification Of The Substance Or Mixture		
2.1.1	Classification according to Regulation (EC) No. 1272/2008 (CLP)		
	Classifications listed also are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).		
	Hazard Pictogram(s)		Health Hazard
	Eye Irrit. 2 H319	Causes serious eye irritation	
	Additional information:		
	There are no other hazards not otherwise classified that have been identified. 0% of the mixture consists of component(s) of unknown toxicity.		
2.2	Label Elements		
2.2.1	Label Elements According to Regulation (EC) No. 1272/2008 (CLP)		
	The product is additionally classified and labelled according to the Globally Harmonized System within the United States (GHS).		
	The substance is classified and labelled according to the CLP regulation.		
	Hazard Pictogram(s)		GHS07
		Signal Word(s)	WARNING
	Hazard-determining components of labelling:		
	Hazard Statement(s)	H319 Causes serious eye irritation.	
	Precautionary Statement(s)	P280 Wear protective gloves / eye protection. P264 Wash thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention.	
	Hazard description:		
	NFPA ratings (scale 0 - 4)		Health = 1 Fire = 0 Reactivity = 0
	HMIS-ratings (scale 0 - 4)		Health = 1 Fire = 0 Reactivity = 0
	HMIS Long	None of the ingredients are listed.	

Safety data sheet

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According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS

Revision: 11.06.2018

Durazon CSB, CSG (See Page 1)



2.3	Term Health Hazard Substances Other Hazards Results of PBT and vPvB assessment	PBT: Not applicable. vPvB: Not applicable.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous Components:

Hazardous Ingredient(s)	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Pictogram(s) and Hazard Statement(s)
zirconium dioxide	50-100	1314-23-4	215-227-2	NA	None substance with a Community workplace exposure limit
calcium oxide	≤ 2,5	1305-78-8	215-138-9	NA	 Eye Dam. 1 H318
					 Skin Irrit. 2, H315; STOT SE 3, H335
aluminium oxide	≤ 2,5	1344-28-1	215-691-6	NA	None substance with a Community workplace exposure limit
hafnium oxide	≤ 2,5	12055-23-1	235-013-2	NA	None None

Additional information: For the wording of the listed hazard statements refer to section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Information: No special measures required.

After Inhalation: Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing.

After Skin Contact: Brush off loose particles from skin. Wash with soap and water. If skin irritation is experienced, consult a doctor.

After Eye Contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After Swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

4.2 Most Important Symptoms And Effects, Both Acute And Delayed

Irritant to eyes.

Hazards

No further relevant information available.

4.3 Indication Of The Immediate Medical Attention And Special Treatment Needed

No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media Use fire extinguishing methods suitable to surrounding conditions.

Unsuitable Extinguishing Media None.

Safety data sheet

Printing date: 11.06.2018

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS

Revision: 11.06.2018

Durazon CSB, CSG (See Page 1)

5.2 Special Hazards Arising From The Substance Or Mixture	No further relevant information available.
5.3 Advice for Fire-Fighters	Wear self-contained respiratory protective device. Wear fully protective suit.
Additional Information	No further relevant information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment And Emergency Procedures	For large spills, use respiratory protective device against the effects of fumes/dust/aerosol. Avoid formation of dust. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.
6.2 Environmental Precautions	No special measures required.
6.3 Methods And Material For Containment And Cleaning Up	Pick up mechanically. Dispose contaminated material as waste according to item 13
6.4 Reference To Other Sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions For Safe Handling	Use only in well ventilated areas. Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water. Any unavoidable deposit of dust must be regularly removed. Prevent formation of dust.
Information About Fire – and explosion protection	No special measures required.
7.2 Conditions For Safe Storage, Including Any Incompatibilities: Requirements to be Met by Storerooms and Receptacles: Information About Storage in One Common Storage Facility: Further information about storage conditions:	No special requirements. Store away from foodstuffs. Store away from oxidizing agents. Do not store together with acids. Keep container tightly sealed.
7.3 Specific End Use(s)	No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace:

zirconium dioxide	1314-23-4	PEL (USA)	Long-term value: 5 mg/m ³ as Zr
		REL (USA)	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ as Zr
		TLV (USA)	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ as Zr
		EL (Canada)	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ as Zr
calcium oxide	1305-78-8	PEL (USA)	Long-term value: 5 mg/m ³
		REL (USA)	Long-term value: 2 mg/m ³

Safety data sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS

Printing date: 11.06.2018 Revision: 11.06.2018

Durazon CSB, CSG (See Page 1)



aluminium oxide	1344-28-1	TLV (USA)	Long-term value: 2 mg/m ³
		EL (Canada)	Long-term value: 2 mg/m ³
		EV (Canada)	Long-term value: 2 mg/m ³
		PEL (USA)	Long-term value: 15*; 15** mg/m ³ *Total dust; ** Respirable fraction
		REL (USA)	Long-term value: 10* 5** mg/m ³ as Al*Total dust**Respirable/pyro powd./welding f.
		TLV (USA)	Long-term value: 1* mg/m ³ as Al; *as respirable fraction
		EL (Canada)	Long-term value: 1,0 mg/m ³ respirable, as Al
hafnium	7440-58-6	EV (Canada)	Long-term value: 10 mg/m ³ total dust
		PEL (USA)	Long-term value: 0,5 mg/m ³ as Hf
		REL (USA)	Long-term value: 0,5 mg/m ³ as Hf
		TLV (USA)	Long-term value: 0,5 mg/m ³ as Hf
		EL (Canada)	Long-term value: 0,5 mg/m ³ as Hf
		EV (Canada)	Long-term value: 0,5 mg/m ³ as Hf

DNELs No further relevant information available.
PNECs No further relevant information available.
Additional information: The lists valid during the making were used as basis.

8.2 Exposure Controls

Personal protective equipment:

General protective and hygienic measures:

8.2	Exposure Controls	
8.2.2	Personal Protective Equipment:	
	General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Do not inhale dust / smoke / mist. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
	Respiratory Protection	Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable.
	Eye Protection	Wear safety glasses.
	Protection of Hands	Wear protective gloves.
	Body Protection	Protective work clothing.
	Limitation and supervision of exposure into the environment	No further relevant information available.
	Risk Management Measures	See Section 7 for additional information. No further relevant information available.

Safety data sheet

Printing date: 11.06.2018

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
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Revision: 11.06.2018

Durazon CSB, CSG (See Page 1)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

Appearance	Granulate	Color	Light yellow
Odor	Odourless	Odor Threshold (ppm)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available	Boiling Point/Boiling Range (°C)	Not available
Flash Point (°C)	No Data	Explosive Limit Ranges	Not available
Auto Ignition Temperature (°C)	Not available	Decomposition Temperature (°C)	Not available
Explosive Properties	None	Oxidizing Properties	Not available
Flammability (Solid, Gas)	Not available	Ph (Value)	Not available
Evaporation Rate	N/A	Vapor Pressure (mm Hg)	Not available
Vapor Density (Air=1)	N/A	Density (g/ml)	5,6 g/cm ³
Solubility (Water)	Insoluble	Solubility (Other)	Not available
Partition Coefficient (N- Octanol/Water)	Not available	Viscosity (mPa.s)	Not available

9.2 Other Information Volatile Organic Chemical (VOC) Content – Not Available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical Stability

Thermal Decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of Hazardous Reactions Reacts with strong acids and alkali. Reacts with strong oxidising agents.

10.4 Conditions To Avoid Prevent formation of dust. Store away from oxidising agents.

10.5 Incompatible Materials No further relevant information available.

10.6 Hazardous Decomposition Product(s) No dangerous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute toxicity:

Primary Irritant Effect:

On the skin:

Slight irritant effect on skin and mucous membranes.

On the eye:

Irritating effect.

Sensitisation:

No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant.

Acute effects (acute toxicity, irritation, and corrosivity):

Irritating if inhaled, causing symptoms of coughing and shortness of breath.

CMR effects (carcinogenicity, mutagenicity, and toxicity for reproduction):

Contains suspect carcinogen in less than reportable quantities.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity:

No further relevant information available.

12.2 Persistence and Degradability

No further relevant information available.

12.3 Bioaccumulative Potential

No further relevant information available.

12.4 Mobility in Soil

No further relevant information available.

Additional ecological information:

General notes:

Not known to be hazardous to water.

12.5 Results of PBT and vPvB

Assessment

PBT: Not applicable.

vPvB: Not applicable.

Safety data sheet

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and US GHS

Revision: 11.06.2018

Durazon CSB, CSG (See Page 1)

12.6 Other Adverse Effects

No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods Recommendation

Contact manufacturer for recycling information. Smaller quantities can be disposed of with household waste. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

Uncleaned Packaging:

Recommendation:

Disposal must be made according to official regulations.

Recommended cleansing agents:

Water, if necessary together with cleansing agents.

SECTION 14: TRANSPORT INFORMATION

Land Transport (ADR/RID) (c)(d)

UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None
Packing Group	None
Hazard Label(s)	None
Environmental Hazards	None
Special Precautions For User	None

Sea Transport (IMDG) (c)

UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None
Packing Group	None
Marine Pollutant	None
Special Precautions For User	None

Land Transport (Within USA) (b)(d)

UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None
Packing Group	None
Hazard Label(s)	None
Environmental Hazards	None
Special Precautions For User	None

Air Transport (ICAO/IATA) (c) (d)

UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None
Packing Group	None
Marine Pollutant	None
Special Precautions For User	None

(b)- ORM-D may be applicable within the USA for package sizes less than 30kg.

(c)- Consult with transport provider.

(d)- Check relevant regulations for Special Provisions.

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

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health And Environmental Regulations/Legislation Specific For The Substance Or Mixture

USA

SARA

Section 355 (extremely hazardous substances)	None of the ingredients are listed.
SARA 313 (Specific toxic chemical listings)	Aluminum oxide listing is only relevant to fibrous forms and is not applicable to the product as supplied.

TSCA (Toxic Substance Control Act)

All ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity: None of the ingredients are listed.

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According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS

Revision: 11.06.2018

Durazon CSB, CSG (See Page 1)

for males:		
Chemicals known to cause developmental toxicity:	None of the ingredients are listed.	
Carcinogenic Categories		
EPA (Environmental Protection Agency)	None of the ingredients are listed.	
IARC (International Agency for Research on Cancer)	None of the ingredients are listed.	
TLV (Threshold Limit Value established by ACGIH)	1314-23-4 zirconium dioxide	A4
	1344-28-1 aluminium oxide	A4
MAK (German Maximum Workplace Concentration)	1344-28-1 aluminium oxide	2
NIOSH-Ca (National Institute for Occupational Safety and Health) Canada	None of the ingredients are listed.	
Canadian Domestic Substances List (DSL)	All ingredients are listed.	
Canadian Ingredient Disclosure list (limit 0.1%)	None of the ingredients are listed.	
Canada Ingredient Disclosure list (limit 1%)	1305-78-8 calcium oxide	
	1344-28-1 aluminium oxide	
Other regulations, limitations and prohibitive regulations		
Substances of very high concern (SVHC) according to REACH, Article 57	None of the ingredients are listed.	
15.2 Chemical Safety Assessment	A Chemical Safety Assessment has not been carried out.	

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Additional information:

- The accumulation of airborne dust particles may lead to health and safety risks in some cases. The use of good industrial practices will mitigate this risk.
- The health risks from inhalation of dust particles vary; this is due to particle concentration, exposure length, number of exposures and type of particles inhaled. Please read Section 2,4,6,7 and 8 of the SDS to understand these potential risks. Wear personal protective equipment and follow storage and handling procedures to maintain a safe workplace.
- In rare instances, combustible dusts may represent a potential explosion hazard when airborne. This hazard is often associated with organic dust such as foodstuffs and coal, but may also occur with mineral products. While the majority of our products would be considered non-combustible, the overall airborne environment should be considered when determining the need for mitigation from the potential hazard. Consult recognized experts when necessary in order to determine any possible hazard.

Please read the SDS for specific information concerning these hazards, and contact us with any further questions. We appreciate your continued business.

Relevant phrases

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

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Revision: 11.06.2018

Durazon CSB, CSG (See Page 1)

PNEC: Predicted No-Effect Concentration (REACH)

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Sources

SDS Prepared by:

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