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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION						

Material name	:	BZ7578 ZC HD FLOOR STRIP ZULFFS128 4/1G
Material number	:	0000000001045769
Manufacturer or supplier's	deta	ails
Company	:	Zep Inc.
Address	:	350 Joe Frank Harris Parkway, SE Emerson, GA 30137
Telephone	:	404-352-1680

Emergency telephone numbers

For SDS Information	:	Compliance Services 1-877-428-9937
For a Medical Emergency	:	877-541-2016 Toll Free - All Calls Recorded
For a Transportation	:	CHEMTREC: 800-424-9300 - All Calls Recorded.
Emergency		In the District of Columbia 202-483-7616

Recommended use of the chemical and restrictions on use

Recommended use : Floor Care

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Colour	colourless, clear
Odour	solvent-like

GHS Classification

Skin corrosion Serious eye damage	: Category 1 : Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: H314 Causes severe skin burns and eye damage.
Precautionary statements	 Prevention: P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.



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	P303 + P361 + P353 IF ON SKIN immediately all contaminated clot water/shower. P304 + P340 + P310 IF INHALEI and keep comfortable for breathin POISON CENTER/doctor. P305 + P351 + P338 + P310 IF I water for several minutes. Remov and easy to do. Continue rinsing. CENTER/doctor. P363 Wash contaminated clothin Disposal: P501 Dispose of contents/contair regulation.	thing. Rinse skin with D: Remove person to fresh air ng. Immediately call a N EYES: Rinse cautiously with ve contact lenses, if present Immediately call a POISON g before reuse.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration [%]
2-butoxyethanol	111-76-2	>= 10 - < 20
2-aminoethanol	141-43-5	>= 5 - < 10

The exact percentages of disclosed substances are withheld as trade secrets.

SECTION 4. FIRST AID MEASURES

General advice	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.	
If inhaled	If unconscious, place in recovery position and seek medica advice. If symptoms persist, call a physician. Remove to fresh air.	I
In case of skin contact	Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.	
In case of eye contact	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Rinse immediately with plenty of water, also under the eyel for at least 15 minutes. Remove contact lenses.	ids,



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	Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a sp	ecialist.
If swallowed	 Keep respiratory tract clear. Never give anything by mouth to an If symptoms persist, call a physician DO NOT induce vomiting unless dire physician or poison control center. Take victim immediately to hospital. 	
Most important symptoms and effects, both acute and delayed	 Effects are dependent on exposure (contact time). Effects are immediate and delayed. Symptoms may include blistering, irr Causes severe skin burns and eye of Review section 2 of SDS to see all p 	itation, burns, and pain. lamage.
Notes to physician	: Treat symptomatically. Symptoms n	nay be delayed.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Dry chemical Water spray jet Alcohol-resistant foam Carbon dioxide (CO2)
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	Carbon dioxide (CO2) Carbon monoxide Smoke Nitrogen oxides (NOx)
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Standard procedure for chemical fires.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions,	:	Use personal protective equipment.
protective equipment and		Ensure adequate ventilation.



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emergency procedures	Refer to protective measures listed in sections 7 and 8.		
Environmental precautions	 Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. 		
Methods and materials for containment and cleaning up	: Soak up with inert absorbent mate acid binder, universal binder, saw Keep in suitable, closed container	dust).	

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	 Do not breathe vapours or spray mist. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. Provide sufficient air exchange and/or exhaust in work rooms.
Conditions for safe storage	 Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	: Store and keep away from, oxidizing agents and acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-butoxyethanol	111-76-2	TWA	20 ppm	ACGIH
		TWA	5 ppm 24 mg/m3	NIOSH REL
		TWA	50 ppm 240 mg/m3	OSHA Z-1
		TWA	25 ppm 120 mg/m3	OSHA P0
		PEL	20 ppm 97 mg/m3	CAL PEL
2-aminoethanol	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m3	NIOSH REL
		ST	6 ppm	NIOSH REL



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		15 mg/m3	
	TWA	3 ppm 6 mg/m3	OSHA Z-1
	STEL	6 ppm 15 mg/m3	OSHA P0
	TWA	3 ppm 8 mg/m3	OSHA P0
	PEL	3 ppm 8 mg/m3	CAL PEL
	STEL	6 ppm 15 mg/m3	CAL PEL

Biological occupational exposure limits

Component	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
2-BUTOXYETHANOL	111-76-2	Butoxyacetic acid (BAA)	Urine	End of shift (As soon as possible after exposure ceases)	200.mg/g Creatinine	ACGIH BEI

Engineering measures	: effective ventilation in all processing are	eas
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Personal protective equipment

Respiratory protection	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
	 Protective gloves The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	 Access to clean water to rinse eyes must be available, options include: eye wash stations or showers, or eye wash bottles with pure water. Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES



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Appearance	: liquid	
Colour	: colourless, clear	
Odour	: solvent-like	
Odour Threshold	: No data available	
рН	: 11.5 - 12.5	
Melting point/freezing point	: No data available	
Boiling point	: >100 °C	
Flash point	: > 93.3 °C Method: TCC	
Evaporation rate	: <1	
Upper explosion limit	: No data available	
Lower explosion limit	: No data available	
Vapour pressure	: 19 hPa (20 °C)	
Relative vapour density	: No data available	
Density	: 1 g/cm3	
Solubility(ies)		
Water solubility	: soluble in cold water, soluble in hot w	water
Solubility in other solvents	: not determined	
Partition coefficient: n- octanol/water	: No data available	
Auto-ignition temperature	: not determined	
Thermal decomposition	: No data available	
Viscosity		
Viscosity, kinematic	: No data available	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Acids Oxidizing agents
Hazardous decomposition	: Carbon oxides



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Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

Potential Health Effects	
Aggravated Medical Condition Symptoms of Overexposure	 None known. Effects are dependent on exposure (dose, concentration, contact time). Effects are immediate and delayed. Symptoms may include blistering, irritation, burns, and pain.
Carcinogenicity:	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed
ACGIH	human carcinogen by IARC. Confirmed animal carcinogen with unknown relevance to humans
OSHA	2-butoxyethanol 111-76-2 No component of this product present at levels greater than or
NTP	equal to 0.1% is on OSHA's list of regulated carcinogens. No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Acute toxicity	
Product:	
Acute oral toxicity	: Acute toxicity estimate : 4,262 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : 45.84 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate : 4,471 mg/kg Method: Calculation method
Components:	
2-butoxyethanol: Acute oral toxicity	: LD50 Oral Rat: 880 mg/kg
Acute dermal toxicity	: LD50 Dermal Rabbit: 1,060 mg/kg
2-aminoethanol:	



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Acute oral toxicity	: LD50 Oral Mouse: 700 mg/kg	
	LD50 Oral Rat: 1,515 mg/kg	
Acute inhalation toxicity	: LC50 Mouse: > 1.21 mg/l	
Skin corrosion/irritation		
Product:		
Remarks: Extremely corros	ive and destructive to tissue.	
Serious eye damage/eye irritat	tion	
Product:		
Remarks: May cause irreve	rsible eye damage.	
Respiratory or skin sensitisati	on	
No data available		
Germ cell mutagenicity		
No data available		
Carcinogenicity		
No data available		
Reproductive toxicity		
No data available		
STOT - single exposure		
No data available		
STOT - repeated exposure		
No data available		
Aspiration toxicity		
No data available		
Further information		
Product:		

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available



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Persistence and degradability		
No data available Bioaccumulative potential		
Product:		
Partition coefficient: n- octanol/water	: Remarks: No data available	
Mobility in soil		
No data available		
Other adverse effects		
No data available <u>Product:</u>		
Regulation	40 CFR Protection of Environmen Stratospheric Ozone - CAA Sectio Substances	,
Remarks	This product neither contains, nor with a Class I or Class II ODS as of Clean Air Act Section 602 (40 CFF + B).	defined by the U.S.
Additional ecological information	: No data available	

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 Dispose of in accordance with local regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

Transportation Regulation: 49 CFR (USA): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IMDG (Vessel): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Cargo Air):

SAFETY DATA SHEET



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NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: IATA (Passenger Air): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

Transportation Regulation: TDG (Canada): NOT REGULATED AS DANGEROUS GOODS OR HAZARDOUS MATERIAL

The product as delivered to the customer conforms to packaging requirements for shipment by road under US Department of Transportation (DOT) regulations. Additional transportation classifications noted above are for reference only, and not a certification or warranty of the suitability of the packaging for shipment under these alternative transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list

: No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
2,2'-iminodiethanol	111-42-2	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	Skin corrosion or irritation Serious eye damage or eye irritatio	n	
SARA 302	:	No chemicals in this material are su requirements of SARA Title III, Sec	•	orting
SARA 313	:	 The following components are subject to reporting levels established by SARA Title III, Section 313: 		
		2-butoxyethanol	111-76-2	16.0091 %
California Prop. 65				

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	WARNING: This product can exp including 2,2'-iminodiethanol, wh of California to cause cancer. For	ich is/are known to the State

www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

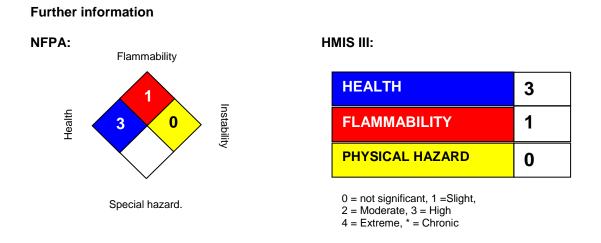
DSLAll components of this product are on the Canadian DSLTSCAOn TSCA Inventory

For information on the country notification status for other regions please contact the manufacturer's regulatory group.

Inventory Acronym and Validity Area Legend:

TSCA (USA), DSL (Canada), NDSL (Canada)

SECTION 16. OTHER INFORMATION



OSHA - GHS Label Information:

Hazard pictograms	
Signal word Hazard statements Precautionary statements	 Danger: Causes severe skin burns and eye damage. Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before



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reuse.

Disposal: Dispose of contents/container in accordance with local regulation.

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