

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 05/18/2015 Supersedes: 06/24/2013

SECTION 1: Identification of the substant	nce/mixture and of the company/u	Indertaking	
1.1. Product identifier			
	1ixture		
	luline 23-87		
	fixture		
	933 - Mix23-87A		
	Resin Bonded Magnesia-Carbon Brick		
1.2. Relevant identified uses of the substance	5		
	Refractory Brick		
1.3. Details of the supplier of the safety data	sheet		
Resco Products, Inc.			
One Robinson Plaza, Suite 300			
6600 Steubenville Pike			
Pittsburgh, PA 15205 - United States			
412-494-4491			
www.rescoproducts.com			
1.4. Emergency telephone number			
	MERGENCY ONLY (CHEMTREC) USA & C	anada 1-800-42	24-9300
(Outside USA & Canada +1 703-741-5970		
SECTION 2: Hazards identification			
2.1. Classification of the substance or mixtu	ie.		
GHS-US classification			
Not classified			
2.2. Label elements			
GHS-US labelling			
Hazard pictograms (GHS-US) :	$\mathbf{\wedge}$		
	\• /		
	$\mathbf{\nabla}$		
	GHS07		
o	Varning		
, , , , , , , , , , , , , , , , , , ,	oust when sawing or tear out		
	I315 - Causes skin irritation		
	I320 - Causes eye irritation		
	I335 - May cause respiratory irritation 280 - Wear eye protection, protective gloves	Sofoty choose	
Precautionary statements (GHS-US) : F 2.3. Other hazards	200 - Wear eye protection, protective gloves	, Salety shoes	
No additional information available			
2.4. Unknown acute toxicity (GHS US)			
Not applicable			
SECTION 3: Composition/information of	n ingredients		
	ringreatents		
3.1. Substance			
Not applicable			
3.2. Mixture			
Name	Product identifier	%	GHS-US classification
Magnesium Oxide	(CAS No) 1309-48-4	75 - 95	Not classified
graphite	(CAS No) 7782-42-5	5 - 10	Not classified
Phenolic Resin	(CAS No) None	1 - 5	Not classified
Aluminum - metal powder	(CAS No) 7429-90-5	1-5	Not classified
Full text of H-phrases: see section 16			
SECTION 4: First aid measures			
4.1. Description of first aid measures			
5	lever give anything by mouth to an unconsci	ous person. If yo	ou feel unwell, seek medical
	dvice.	tim into freak -	-
	Oust when sawing or tear out. Remove the view	cum into fresh a	Ι.
	Sently wash with plenty of soap and water. F IN EYES: Rinse cautiously with water for se	averal minutes	Remove contact longon, if propert
	nd easy to do. Continue rinsing.	everar minutes.	Nemove contact lenses, il plesell
	tinse mouth with water. Do not induce vomiti	na	
4.2. Most important symptoms and effects, b No additional information available	oth acute and delayed		

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4.3. Indication of any immediate medical attention and special treatment needed No additional information available SECTION 5: Firefighting measures				
5.1. Extinguishing media Suitable extinguishing media Unsuitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.			
5.2. Special hazards arising from the substance or mixture Fire hazard : Non-flammable. Do not breathe fumes from fires or vapours from decomposition.				
5.3. Advice for firefighter	rs			
Firefighting instructions	:	Exercise caution when fighting any		
Protection during firefighting	:		out suitable protective equipment. Self-contained breathing	
Other information	:	and/or irritating vapors when initial products such as carbon monoxide incomplete combustion when temp follows: (1) to apprise the custome advise that the chemical compoun practices may exceed TLV's for sp witch may be produced include bu alcohols, glycols, and other solven	tain small quantities of chemicals which can generate toxic ly heated. Under fire conditions hazardous combustion e may be generated. The phenolic resin binder may undergo berature is applied to this product. The intent of this note is as in/user of the potential for incomplete combustion, and (2) to ds produced by incomplete combustion by poor air handling becific air contaminates. The specific chemical compounds t are not limited to: carbon monoxide, formaldehyde, phenol, its.	
SECTION 6: Accidental	release measu	res		
		oment and emergency procedures	S	
6.1.1. For non-emergency				
Protective equipment Emergency procedures	-	Safety glasses. Protective gloves. Avoid contact with skin and eyes.	Safety shoes.	
6.1.2. For emergency resp	onders .	Avoid contact with skin and eyes.		
Protective equipment	:	Equip cleanup crew with proper pr		
Emergency procedures	:	Collect spillage. On land, sweep of	r shovel into suitable containers.	
6.2. Environmental precautions No additional information available				
6.3. Methods and materia				
For containment : Collect spillage. Methods for cleaning up : Recover mechanically the product.				
6.4. Reference to other s				
No additional information availa SECTION 7: Handling a				
7.1. Precautions for safe Precautions for safe handling		Avoid contact with skin and eyes.		
Hygiene measures			reas with mild soap and water before eating, drinking or	
		smoking and when leaving work.		
7.2. Conditions for safe storage, including any incompatibilities				
Storage conditions	:		where it can be protected from the elements.	
Incompatible products Incompatible materials	:	Strong acids. Oxidizing agents and strong acids.		
7.3. Specific end use(s)	•			
No additional information availa				
SECTION 8: Exposure c		al protection		
8.1. Control parameters				
Nuline 23-87 (Mixture)				
ACGIH	Not applicable			
OSHA	Not applicable			
Magnesium Oxide (1309-48-4)				
ACGIH	ACGIH TWA (mg	/m³)	10 mg/m ³	
OSHA	Not applicable			
graphite (7782-42-5)				
ACGIH	ACGIH TWA (mg	/m³)	2 mg/m ³	
OSHA	Not applicable	···· ,	- ····g·····	
Phenolic Resin (None)	Not oppligable			
ACGIH	Not applicable			
OSHA	Not applicable			

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Aluminum - metal powder (7429	•	
	CGIH TWA (mg/m³) 1 mg/m³	
OSHA N	lot applicable	
8.2. Exposure controls Hand protection Eye protection Respiratory protection	 protective gloves. Safety glasses. Use care during processing (cutting, sawing, etc.) to minimize generation of dust. Wear appropriate mask. 	
SECTION 9: Physical and o	chemical properties	
9.1. Information on basic ph	hysical and chemical properties	
Physical state	: Solid	
Appearance Colour	: Solid in various shapes. : Black	
Odour	: Resin Odor	
Odour threshold	: No data available	
рН	: No data available	
Melting point	: > 2800 °F	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: No data available	
Relative evaporation rate (butylace)	tate=1) : No data available	
Flammability (solid, gas)	: No data available	
Explosive limits	: No data available	
Explosive properties	: No data available	
Dxidising properties	: No data available	
/apour pressure	: No data available	
Relative density	: ≈ 2.9	
Relative vapour density at 20 °C	: No data available	
Solubility	: Water: Insoluble	
₋og Pow	: No data available	
₋og Kow	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
/iscosity	: No data available	
/iscosity, kinematic	: No data available	
/iscosity, dynamic	: No data available	
9.2. Other information		
No additional information available SECTION 10: Stability and	reactivity	
10.1. Reactivity No additional information available		
10.2. Chemical stability Stable under normal conditions.		
10.3. Possibility of hazardous	s reactions	
No additional information available		
10.4. Conditions to avoid No additional information available		
10.5. Incompatible materials		
Strong acids.		
10.6. Hazardous decomposition products The phenolic resin binder may undergo incomplete combustion when temperature is applied to this product. The intent of this note is as follows: (1) to apprise the customer/user of the potential for incomplete combustion, and (2) to advise that the chemical compounds produced by incomplete		
	actices may exceed TLV's for specific air contaminates. The specific chemical compounds witch may be produced on monoxide, formaldehyde, phenol, alcohols, glycols, and other solvents.	
11.1. Information on toxicolo		
Acute toxicity	: Not classified	
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Magnesium Oxide (1309-48-4)	
LD50 oral rat	> 5000 mg/kg (Rat; Literature study)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (Rabbit; Literature study)
graphite (7782-42-5)	
LD50 oral rat	> 2000 mg/kg (Rat; Literature study)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity Specific target organ toxicity (single exposure)	: Not classified : Not classified
Specific target organ toxicity (single exposure)	: Not classified
exposure)	
Aspiration hazard	: Not classified
SECTION 12: Ecological information	
12.1. Toxicity	
No additional information available	
12.2. Persistence and degradability	
Magnesium Oxide (1309-48-4)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
ThOD	Not applicable (inorganic)
graphite (7782-42-5)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
Aluminum - metal powder (7429-90-5)	
Persistence and degradability	Biodegradability in soil: not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
12.3. Bioaccumulative potential	
Magnesium Oxide (1309-48-4)	Discourse dations not applicable
Bioaccumulative potential	Bioaccumulation: not applicable.
graphite (7782-42-5)	
Bioaccumulative potential	No bioaccumulation data available.
Aluminum - metal powder (7429-90-5)	
Bioaccumulative potential	No bioaccumulation data available.
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12.4. Mobility in soil No additional information available	
12.5. Other adverse effects	
Effect on the global warming	: No known ecological damage caused by this product.
SECTION 13: Disposal consideration	
13.1. Waste treatment methods	
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
SECTION 14: Transport information	
Department of Transportation (DOT)	
In accordance with DOT	
Not regulated for transport	
Additional information	
Other information	: No supplementary information available.
ADR No additional information available	
Transport by sea	
No additional information available	
05/40/0045	

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Air transport No additional information available SECTION 15: Regulatory information			
15.1. US Federal regulations No additional information available 15.2. International regulations CANADA			
Nuline 23-87 (Mixture)			
WHMIS Classification	D2B		
EU-Regulations No additional information available Classification according to Regulation (EC) No. 1272/2008 [CLP] No additional information available Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not classified National regulations No additional information available 15.3. US State regulations			
SECTION 16: Other information			

SDS US (GHS HazCom 2012) This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, Resco Products, Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.