

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 05/28/2021 Revision date: 05/28/2021 Supersedes: 02/13/2019

SECTION 1: Identification					
I.1. Identification					
Product form	: Mixture				
Product name	: R 85 DV				
CAS-No.	: Mixture				
Product code	: 3201				
Other means of identification	: Alumina-S	Silicate Dry Vibratable			
.2. Recommended use and restrictions of					
Use of the substance/mixture	: Refractor				
Recommended use	: Industrial	use			
.3. Supplier					
Resco Products, Inc. One Robinson Plaza, Suite 300					
6600 Steubenville Pike					
Pittsburgh, PA 15205 - United States					
412-494-4491					
SDS@RescoProducts.com - WWW.RescoProdu	icts com				
.4. Emergency telephone number	<u>1010.00111</u>				
Emergency number	· EMERGE	ENCY ONLY (CHEMTRE	C) USA & Canad	2 1-800-424-9300	
		JSA & Canada +1 703-7			
ECTION 2: Hazard(s) identification					
1. Classification of the substance or mix	xture				
GHS US classification	11045 0	an alda bott - tt -			
Skin corrosion/irritation Category 2		ses skin irritation			
Serious eye damage/eye irritation Category 2B		ses eye irritation	2)		
Carcinogenicity Category 1A	risou iviay	cause cancer (Inhalation	1)		
ull text of H statements : see section 16					
2. GHS Label elements, including preca	utionary stat	ements			
HS US labeling					
Hazard pictograms (GHS US)	· ·				
Signal word (GHS US)	: Danger				
Hazard statements (GHS US)	: H315 - Ca	auses skin irritation			
		auses eye irritation			
		ay cause cancer (Inhala			
Precautionary statements (GHS US)		ear eye protection, prote			
		13 - If skin irritation occu			
		13 - If eye irritation pers	ists: Get medical a	advice/attention.	
		o not breathe dust.			
3. Other hazards which do not result in				the target where the second	
Other hazards not contributing to the				e, that may give off smoke or fumes du	
classification				de, carbon dioxide, and hydrocarbons.	
4. Unknown acute toxicity (GHS US)	Adequate	e ventilation and appropr	late respiratory pr	otection may be required.	
ot applicable					
ECTION 3: Composition/Information	on ingrad	lionte			
	on ingree	lients			
1. Substances					
ot applicable					
2. Mixtures					
Name		Product identifier	%	GHS US classification	
aluminium oxide, non-fibrous		(CAS-No.) 1344-28-1	75 – 95	Not classified	
quartz		(CAS-No.) 14808-60-7	1 – 5	Carc. 1A, H350	
•		· · · · ·			
cristobalite		(CAS-No.) 14464-46-1	0.5 – 1	Carc. 1A, H350	
Il text of hazard classes and H-statements : see	e section 16				
ECTION 4: First-aid measures					
1. Description of first aid measures					
First-aid measures general	: Never giv	e anything by mouth to	an unconscious p	erson. If you feel unwell, seek medical	
ő		how the label where pos			
First-aid measures after inhalation	: Allow affe	ected person to breathe	fresh air. Allow the	e victim to rest.	
First-aid measures after skin contact		ash with plenty of soap a			
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First-aid measures after eye contact	and easy to do. Continue rinsing.			
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.			
.2. Most important symptoms and e Potential Adverse human health effects and				
symptoms				
Symptoms/effects after inhalation	: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure			
	through inhalation.			
Symptoms/effects after skin contact	: Causes skin irritation.			
Symptoms/effects after eye contact	: Causes eye irritation.			
.3. Immediate medical attention and lo additional information available	i special treatment, if necessary			
SECTION 5: Fire-fighting measure				
.1. Suitable (and unsuitable) extingu				
Suitable extinguishing media Unsuitable extinguishing media	<ul> <li>Use extinguishing media appropriate for surrounding fire.</li> <li>In case of fire, all extinguishing media allowed.</li> </ul>			
.2. Specific hazards arising from the				
Fire hazard	: Not flammable.			
.3. Special protective equipment an	d precautions for fire-fighters			
Firefighting instructions	: No specific fire-fighting instructions required.			
Protection during firefighting Other information	: Do not enter fire area without proper protective equipment, including respiratory protection.			
Other Information	<ul> <li>This product contains a dust suppression admixture, that may give off smoke or fumes during initial heat up. These fumes include carbon monoxide, carbon dioxide, and hydrocarbons.</li> </ul>			
	Adequate ventilation and appropriate respiratory protection may be required.			
SECTION 6: Accidental release m				
	e equipment and emergency procedures			
1.1. For non-emergency personnel	equipment and emergency procedures			
Emergency procedures	: Do not breathe dust.			
.1.2. For emergency responders				
Protective equipment	: Equip cleanup crew with proper protection.			
Emergency procedures	: Ventilate area.			
.2. Environmental precautions				
.3. Methods and material for contair	nment and cleaning up			
For containment	: Collect spillage.			
Methods for cleaning up	: On land, sweep or shovel into suitable containers. Minimize generation of dust.			
.4. Reference to other sections				
See Heading 8. Exposure controls and perso				
SECTION 7: Handling and storage				
.1. Precautions for safe handling				
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Avoid raising dust.			
Hygiene measures	Avoid contact with skin and eyes. Do not breathe dust. : Wash hands and other exposed areas with mild soap and water before eating, drinking or			
	smoking and when leaving work.			
.2. Conditions for safe storage, inclu				
Storage conditions	: Store in a dry place.			
SECTION 8: Exposure controls/pe	ersonal protection			
.1. Control parameters				
R 85 DV (Mixture)				
No additional information available				
cristobalite (14464-46-1)				
• •	1 Juniter			
USA - ACGIH - Occupational Exposure				
ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> respirable dust			
	Limits			
USA - OSHA - Occupational Exposure I				
USA - OSHA - Occupational Exposure I OSHA PEL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> respirable dust			
OSHA PEL (TWA) (mg/m <sup>3</sup> ) aluminium oxide, non-fibrous (1344-28-	-1)			
OSHA PEL (TWA) (mg/m <sup>3</sup> ) aluminium oxide, non-fibrous (1344-28- USA - ACGIH - Occupational Exposure	-1) Limits			
OSHA PEL (TWA) (mg/m <sup>3</sup> ) aluminium oxide, non-fibrous (1344-28- USA - ACGIH - Occupational Exposure ACGIH TWA (mg/m <sup>3</sup> )	-1)			
OSHA PEL (TWA) (mg/m <sup>3</sup> ) aluminium oxide, non-fibrous (1344-28- USA - ACGIH - Occupational Exposure ACGIH TWA (mg/m <sup>3</sup> ) quartz (14808-60-7)	-1) Limits 1 mg/m <sup>3</sup> respirable dust			
OSHA PEL (TWA) (mg/m <sup>3</sup> ) aluminium oxide, non-fibrous (1344-28- USA - ACGIH - Occupational Exposure ACGIH TWA (mg/m <sup>3</sup> )	-1) Limits 1 mg/m <sup>3</sup> respirable dust			

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USA - OSHA - Occupational Exposure Limits	\$	
Local name	Silica, crystalline quartz, respirable dust	
OSHA PEL (TWA) (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup> respirable dust	
Remark (OSHA)	(3) See Table Z-3.	
8.2. Appropriate engineering controls Appropriate engineering controls	: Provide adequate ventilation to minimize dust concentrations.	
8.3. Individual protection measures/Perso	nal protective equipment	
Personal protective equipment: Avoid all unnecessary exposure.		
Hand protection:		
Wear protective gloves.		
Eye protection: Chemical goggles or safety glasses		
Skin and body protection:		
Wear suitable protective clothing		
Respiratory protection:		
Wear appropriate mask Other information:		
Do not eat, drink or smoke during use.		
<b>SECTION 9: Physical and chemical pr</b>	operties	
9.1. Information on basic physical and che		
Physical state	: Solid	
Appearance Color	: Granular mixture. : brown Gray	
Odor	: odorless	
Odor threshold	: Not applicable	
pH	: No data available	
Melting point	: > 3000 °F	
Freezing point	: Not applicable	
Boiling point	: Not applicable	
Critical temperature	: Not applicable	
Critical pressure	: Not applicable	
Flash point	: Not applicable	
Relative evaporation rate (butyl acetate=1)	: Not applicable	
Relative evaporation rate (ether=1) Flammability (solid, gas)	: Not applicable : Non flammable.	
Vapor pressure	: Not Applicable	
Vapor pressure at 50 °C Relative vapor density at 20 °C	: Not Applicable : No data available	
Relative density	: ≈ 2.4	
Solubility	: Slightly soluble.	
Partition coefficient n-octanol/water (Log Pow)	: No data available	
Auto-ignition temperature	: Not applicable	
Decomposition temperature	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: Not Applicable	
Explosion limits	: Not applicable	
Explosive properties	: No data available	
Oxidizing properties 9.2. Other information	: No data available	
No additional information available		
SECTION 10: Stability and reactivity		
10.1. Reactivity		
None known. 10.2. Chemical stability		
Stable under normal conditions.		
10.3. Possibility of hazardous reactions		
Not established. 10.4. Conditions to avoid		
Avoid dust formation.		
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0.5. Incompatible materials lo additional information available	
0.6. Hazardous decomposition product	S
o additional information available	
ECTION 11: Toxicological informa	tion
1.1. Information on toxicological effects	S
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
aluminium oxide, non-fibrous (1344-28-1)	
LD50 oral rat	> 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral)
LC50 Inhalation - Rat	7.6 mg/l air (Equivalent or similar to OECD 403, 1 h, Rat, Male, Experimental value, Inhalation (aerosol))
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation Respiratory or skin sensitization	: Causes eye irritation. : Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer (Inhalation).
quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard Viscosity, kinematic	: Not classified : No data available
Likely routes of exposure	: Inhalation.
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation	: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact ECTION 12: Ecological information	: Causes eye irritation.
o additional information available 2.2. Persistence and degradability R 85 DV (Mixture)	
Persistence and degradability	Not established.
cristobalite (14464-46-1)	
Persistence and degradability	Mineral. Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	
	Not applicable
BOD (% of ThOD)	Not applicable           Not applicable
, , , , , , , , , , , , , , , , , , ,	Not applicable
aluminium oxide, non-fibrous (1344-28-1)	Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability	Not applicable           Not applicable.
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD)	Not applicable       Not applicable.       Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD	Not applicable           Not applicable.
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7)	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD)	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable.         Not applicable.         Not applicable.         Not applicable.
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD)	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable.         Not applicable         Not applicable         Not applicable         Not applicable         Not applicable         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable.         Not applicable.         Not applicable.         Not applicable.
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable.         Not applicable         Not applicable         Not applicable         Not applicable         Not applicable         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential R 85 DV (Mixture)	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential R 85 DV (Mixture) Bioaccumulative potential	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable.         Not applicable         Not applicable         Not applicable         Not applicable         Not applicable         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential R 85 DV (Mixture) Bioaccumulative potential cristobalite (14464-46-1)	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential R 85 DV (Mixture) Bioaccumulative potential	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential R 85 DV (Mixture) Bioaccumulative potential cristobalite (14464-46-1)	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable         Not applicable
aluminium oxide, non-fibrous (1344-28-1) Persistence and degradability Chemical oxygen demand (COD) ThOD quartz (14808-60-7) Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential R 85 DV (Mixture) Bioaccumulative potential cristobalite (14464-46-1) Bioaccumulative potential	Not applicable         Not applicable.         Not applicable         Not applicable         Not applicable.         Not applicable         Not applicable

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quartz (14808-6	0-7)					
Bioaccumulative			No data av	vailable.		
12.4. Mobility	•					
cristobalite (14						
Ecology - soil	+0+-+0-1)		No data av	ailabla		
		I	NU Uala av			
	e, non-fibrous (1344	-28-1)				
Ecology - soil			No data av	vailable.		
	verse effects		News Laws			
Effect on the globa Other information	ai warming		None know	vn ffects known.		
	isposal conside			arects known.		
	methods	Jianonio				
	g disposal recommen	dations ·	Dispose in	a safe manner in accord	ance with local/national regulat	ions
Ecology - waste m				ase to the environment.		
	ransport inform	ation				
Department of Tr	ansportation (DOT)					
In accordance with	DOT					
Not regulated	f Dangerous Goods					
Not regulated	Dangerous Goous					
Transport by sea						
Not regulated						
Air transport						
Not regulated	egulatory inform	nation				
		Πατισπ				
15.1. US Federal re						
R 85 DV (Mixtur	•	ad an Antium		al fuene lietine, en the Linit	ad Ctatas Faring and a Drate	
	es Control Act (TSCA)		, or exclude	ed from listing, on the Unit	ed States Environmental Prote	ction Agency
	e, non-fibrous (1344					
	porting requirements		A States SA	PA Section 212		
					um Oxide (Fibrous forms)"; the	
		uct is non-fib	prous, and t	hus is not a section 313 n	naterial. Only manufacturing, p	
15.2. International	regulations					
CANADA						
cristobalite (14	464-46-1)					
Listed on the Ca	nadian DSL (Domest	ic Substance	es List)			
aluminium oxid	e, non-fibrous (1344	-28-1)				
Listed on the Ca	nadian DSL (Domest	ic Substance	es List)			
EU-Regulations			/			
No additional inform						
National regulation						
quartz (14808-6	,					
	International Agency	for Research	n on Cance	r)		
15.3. US State regu R 85 DV (Mixtur	e)					
U.S California information	- Proposition 65 - Oth	ner			lica, a chemical known to the s on go to WWW.P65Warnings.c	
cristobalite (144	464-46-1)					
U.S	U.S California -	U.S Calif	fornia -	U.S California -	No significant risk level	Maximum allowable
California -	Proposition 65 -	Propositior	n 65 -	Proposition 65 -	(NSRL)	dose level (MADL)
Proposition 65	Developmental	Reproducti		Reproductive Toxicity		
<ul> <li>Carcinogens</li> <li>List</li> </ul>	Toxicity	Toxicity - F	emale	- Male		
Yes	No	No		No		
162	No	No		UP		

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quartz (14808-6	60-7)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		
Component			State or local regulations	3	
Cristobalite (14464-46-1)		U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List			
aluminium oxide, non-fibrous (1344-28-1)		U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List			
Quartz (14808-60-7)		U.S New Jersey - Right to Know Hazardous Substance List			
ECTION 16. C	Other information	n			

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Other information

Report language name. English. In the event of any conflict between English and other : language versions, the English version shall prevail.

Full text of H-phrases:

H315	Causes skin irritation
H320	Causes eye irritation
H350	May cause cancer

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.