

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 3/15/2015 Revision date: 6/20/2024 Supersedes: 5/17/2021

SECTION 1: Identification					
1.1. Identification					
Product name CAS-No. Product code	: Mixture : Quikturn 60PC : Mixture : 0632 : Alumina-Silicate	Cement Bonder	d Castable		
1.2. Recommended use and restrictions on u		Coment Donact			
	: Refractory				
	: Industrial use				
1.3. Supplier					
Resco Products, Inc. One Robinson Plaza, Suite 300 6600 Steubenville Pike Pittsburgh, PA, 15205 United States T 412-494-4491 <u>SDS@RescoProducts.com</u> - <u>WWW.RescoProducts.com</u>	<u>om</u>				
1.4. Emergency telephone number					
Emergency number	: EMERGENCY C Outside USA & (Canada 1-800-	424-9300
SECTION 2: Hazard(s) identification					
2.1. Classification of the substance or mixtu	re				
GHS-US classification Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2B Carcinogenicity, Category 1A Full text of H-statements: see section 16	ł	H320	Causes skir Causes eye May cause		on).
2.2. GHS Label elements, including precaution	onary statement	ts			
GHS US labelling Hazard pictograms (GHS US)					
Signal word (GHS US) : Danger Hazard statements (GHS US) : H315 - Causes skin irritation. H320 - Causes eye irritation H350 - May cause cancer (Inhalation). Precautionary statements (GHS US) : P280 - Wear eye protection, Dust Respirator, protective gloves. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P260 - Do not breathe dust.					
2.3. Other hazards which do not result in cla	ssification				
No additional information available					
2.4. Unknown acute toxicity (GHS US)					
No additional information available					
SECTION 3: Composition/information of	n ingredients				
3.1. Substances					
Not applicable					
3.2. Mixtures					
Name		Product i		%	GHS-US classification
aluminium oxide, non-fibrous		CAS-No.: 1		10 – 20	Not classified
Calcium Aluminate Cement		CAS-No.: 6	5997-16-2	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
quartz		CAS-No.: 1	4808-60-7	1 – 5	Carc. 1A, H350
cristobalite		CAS-No.: 1		0.1 – 0.5	Carc. 1A, H350
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Full text of hazard classes and H-statements : see	section 16
SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact First-aid measures after eye contact	: Gently wash with plenty of soap and water. : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects	
Potential adverse human health effects and symptoms	: Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause
Symptoms/effects after skin contact	cancer by inhalation. Causes skin irritation.
Symptoms/effects after eye contact	: Causes eye irritation.
4.3. Immediate medical attention and spec	ial treatment, if necessary
No additional information available	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishin	g media
Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: In case of fire, all extinguishing media allowed.
5.2. Specific hazards arising from the cher	
Fire hazard	: Not flammable.
5.3. Special protective equipment and pred Firefighting instructions	: Fight fire with normal precautions from a reasonable distance.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measu	ires
6.1. Personal precautions, protective equi	pment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures 6.1.2. For emergency responders	: Do not breathe dust. Avoid contact with skin and eyes.
Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area. On land, sweep or shovel into suitable containers.
6.2. Environmental precautions	
Prevent entry to sewers and public waters.	t and elegning up
6.3. Methods and material for containment	: On land, sweep or shovel into suitable containers. Minimise generation of dust.
Methods for cleaning up 6.4. Reference to other sections	
See Section 8. Exposure controls and personal pro	tection
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	Do not handle until all cofety propositions have been read and understand. Avaid minimum that
Precautions for safe handling	: Do not handle until all safety precautions have been read and understood. Avoid raising dust. Avoid contact with skin and eyes. Do not breathe dust.
Hygiene measures	: Wash hands and other exposed areas 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 Incompatible products	 Store this product in a dry location where it can be protected from the elements. Strong bases. Strong acids.
SECTION 8: Exposure controls/persor	nal protection
8.1. Control parameters	
Quikturn 60PC (Mixture)	
No additional information available	
Calcium Aluminate Cement (65997-16-2)	
No additional information available	

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cristobalite (14464-46-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.025 mg/m ³ respirable dust
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA [1]	0.05 mg/m ³ respirable dust
aluminium oxide, non-fibrous (1344-28-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 mg/m ³ respirable dust
quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA	0.005 ms/m2/Ciling Caustelling Quarter UCA. Time undefined sugrams surgeouse limit Q by TUV
ACGIHOELTWA	0.025 mg/m ³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)
USA - OSHA - Occupational Exposure Limits	
Local name	Silica, crystalline quartz, respirable dust
OSHA PEL TWA [1]	0.05 mg/m ³ 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/Person	
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:	
Respiratory protection: Wear appropriate mask	
Respiratory protection: Wear appropriate mask Other information:	
Respiratory protection: Wear appropriate mask	perties
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use.	
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro	
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical	mical properties
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and cher Physical state Appearance Colour	mical properties : Solid : Granular mixture. : Light grey
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chem Physical state Appearance Colour Odour	mical properties : Solid : Granular mixture. : Light grey : earthy
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour Odour threshold	mical properties : Solid : Granular mixture. : Light grey : earthy : No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour threshold pH	mical properties : Solid : Granular mixture. : Light grey : earthy
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour Odour threshold	<pre>mical properties : Solid : Granular mixture. : Light grey : earthy : No data available : ≈ 10.5</pre>
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chem Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point	<pre>mical properties : Solid : Granular mixture. : Light grey : earthy : No data available : ≈ 10.5 : 10 %</pre>
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chem Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point Boiling point	<pre>mical properties : Solid : Granular mixture. : Light grey : earthy : No data available : ≈ 10.5 : 10 % : > 2500 °F</pre>
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chem Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point	 solid Solid Granular mixture. Light grey earthy No data available ≈ 10.5 10 % > 2500 °F No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butylacetate=1)	 solid Solid Granular mixture. Light grey earthy No data available ≈ 10.5 10 % > 2500 °F No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro Physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour Odour <td> solid Solid Granular mixture. Light grey earthy No data available ≈ 10.5 10 % > 2500 °F No data available No flammable. </td>	 solid Solid Granular mixture. Light grey earthy No data available ≈ 10.5 10 % > 2500 °F No data available No flammable.
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro 9.1. Information on concentration 9.1. Physical state 9.1. Physical state 9.1. Physical state 9.1. Physical state 9.1. Physical state	 solid Solid Granular mixture. Light grey earthy No data available ≈ 10.5 10 % > 2500 °F No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butylacetate=1) Flammability (solid, gas) Vapour pressure Relative vapour density at 20°C	 Solid Solid Granular mixture. Light grey earthy No data available ≈ 10.5 10 % > 2500 °F No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butylacetate=1) Flammability (solid, gas) Vapour pressure Relative vapour density at 20°C Relative density	mical properties : Solid : Granular mixture. : Light grey : earthy : No data available : ≈ 10.5 : 10 % : > 2500 °F : No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Flash point Relative evaporation rate (butylacetate=1) Flammability (solid, gas) Vapour pressure Relative density Solubility	 Solid Solid Granular mixture. Light grey earthy No data available ≈ 10.5 10 % > 2500 °F No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro 9.1. Information on basic physical and chemical pro Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butylacetate=1) Flammability (solid, gas) Vapour pressure Relative vapour density at 20°C Relative density	Mical properties: Solid: Granular mixture.: Light grey: earthy: No data available: ≈ 10.5 : 10 %: > 2500 °F: No data available: Slightly soluble.
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chem Physical state Appearance Colour Odour threshold pH pH solution concentration Melting point Freezing point Boiling point Flash point Relative evaporation rate (butylacetate=1) Flammability (solid, gas) Vapour pressure Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature	mical properties : Solid : Granular mixture. : Light grey : earthy : No data available : ≈ 10.5 : 10 % : > 2500 °F : No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro 9.1. Information concentration 9.1. Physical state 0.2. Odour Politing point Flash point Relative evapour density at 20°C <	mical properties : Solid : Granular mixture. : Light grey : earthy : No data available : ≈ 10.5 : 10 % : > 2500 °F : No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro 9.1. Information concentration 9.1. Physical state Appearance Colour Odour Podour Politic point Flash point Relative evapour d	mical properties : Solid : Granular mixture. : Light grey : earthy : No data available : ≈ 10.5 : 10 % : > 2500 °F : No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical provide and physical state Appearance Colour Odour Odour Odour Odour Odour Odour Odour Odour Physical state Physical state Relative evaporation rate (butylacetate=1)	 mical properties Solid Granular mixture. Light grey earthy No data available ≈ 10.5 10 % > 2500 °F No data available
Respiratory protection: Wear appropriate mask Other information: Do not eat, drink or smoke during use. SECTION 9: Physical and chemical pro 9.1. Information on basic physical and chemical pro 9.1. Information concentration 9.1. Physical state Appearance Colour Odour Podour Politic point Flash point Relative evapour d	mical properties : Solid : Granular mixture. : Light grey : earthy : No data available : ≈ 10.5 : 10 % : > 2500 °F : No data available

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9.2. Other information	
No additional information available	
SECTION 10: Stability and reactivity	
10.1. Reactivity	
Hydraulic setting.	
10.2. Chemical stability	
Stable under normal conditions of use.	
10.3. Possibility of hazardous reactions	
Not established.	
10.4. Conditions to avoid	
Avoid dust formation.	
10.5. Incompatible materials	
Strong acids. Strong bases.	
10.6. Hazardous decomposition products	
No additional information available	
SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
	Not classified
	Not classified Not classified
aluminium oxide, non-fibrous (1344-28-1)	
LD50 oral rat	> 15900 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
Skin corrosion/irritation :	Causes skin irritation. pH: ≈ 10.5
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
pH	6-7
aluminium oxide, non-fibrous (1344-28-1)	
рН	9 – 10.5 (aqueous suspension, 33 %)
quartz (14808-60-7)	
рН	6 – 7
Serious eye damage/irritation :	Causes eye irritation. pH: ≈ 10.5
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
pН	6-7
aluminium oxide, non-fibrous (1344-28-1)	
pH	9 – 10.5 (aqueous suspension, 33 %)
·	
quartz (14808-60-7)	
pH	6-7
Respiratory or skin sensitisation :	Not classified

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Carcinogenicity :	May cause cancer (Inhalation).
quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
-1	Not classified
STOT-single exposure : STOT-repeated exposure :	Not classified Not classified
Aspiration hazard	Not classified
Viscosity, kinematic	Not Applicable
aluminium oxide, non-fibrous (1344-28-1)	
Viscosity, kinematic	Not applicable (solid)
Potential adverse human health effects and symptoms	Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after inhalation :	Danger of serious damage to health by prolonged exposure through inhalation. May cause
Symptoms/effects after skin contact	cancer by inhalation. Causes skin irritation.
Symptoms/effects after eye contact	Causes eye irritation.
SECTION 12: Ecological information	
12.1. Toxicity	
aluminium oxide, non-fibrous (1344-28-1)	
LC50 - Fish [1]	> 100 mg/l (96 h, Salmo trutta, Literature study)
EC50 - Crustacea [1]	> 100 mg/l (48 h, Daphnia magna, Literature study)
12.2. Persistence and degradability	
Quikturn 60PC (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
aluminium oxide, non-fibrous (1344-28-1)	
Persistence and degradability	Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
quartz (14808-60-7)	
Persistence and degradability	Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
12.3. Bioaccumulative potential	
Quikturn 60PC (Mixture)	
Bioaccumulative potential	Not established.
cristobalite (14464-46-1)	
Bioaccumulative potential	No data available.
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aluminium oxide, non-fibrous	s (1344-28-1)	
Bioaccumulative potential	No data available.	
quartz (14808-60-7)		
Bioaccumulative potential	No data available.	
12.4. Mobility in soil		
cristobalite (14464-46-1)		
Ecology - soil	No data available.	
aluminium oxide, non-fibrous	\$ (1344-28-1)	
Surface tension	No data available in the literature	
Ecology - soil	No data available.	
12.5. Other adverse effects		
Effect on global warming	: None known	
SECTION 13: Disposal con	siderations	
13.1. Disposal methods		
Product/Packaging disposal recomn	nendations : Dispose in a safe manner in accordance with local/national regulations.	
SECTION 14: Transport inf	ormation	
Not regulated Transportation of Dangerous Go Not regulated Transport by sea Not regulated Air transport Not regulated		
SECTION 15: Regulatory in	hformation	
15.1. US Federal regulations		
All components of this product are (TSCA) inventory	present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act	
aluminium oxide, non-fibrous	ه (1344-28-1)	
Not subject to reporting requirement	nts of the United States SARA Section 313	
Note	Note: The section 313 chemical list contains "CAS # 1344-28-1 Aluminum Oxide (Fibrous forms)"; the Aluminum oxide contained in this product is non-fibrous, and thus is not a section 313 material. Only manufacturing, processing, or otherwise use of aluminum oxide in the fibrous form triggers reporting.	
15.2. International regulations		
CANADA		
Calcium Aluminate Cement (65997-16-2)		
Listed on the Canadian DSL (Dome	<pre>>stic Substances List)</pre>	
cristobalite (14464-46-1)		
Listed on the Canadian DSL (Dome	estic Substances List)	
aluminium oxide, non-fibrous	\$ (1344-28-1)	
Listed on the Canadian DSL (Dome		
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EU-Regulations No additional information available

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National regulations		
quartz (14808-60-7)		
Listed on IARC (International Agency for Research on Cancer)		
15.3. US State regulations		
Quikturn 60PC (Mixture)		
U.S California - Proposition 65 - Other information	This product contains crystalline silica, a chemical known to the state of California to cause cancer. For more information go to WWW.P65Warnings.ca.gov	

cristobalite (14464-46-1)					
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		

quartz (14808-60-7)					
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	Proposition 65 -	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

Component	State or local regulations
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
SECTION 16: Other information	

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Revision date Other information : 6/20/2024
: Report language name. English. In the event of any conflict between the English and other language versions, the English version shall prevail.

Full text of H-	tements	
H315	Causes skin irritation.	
H320	Causes eye irritation	
H350	May cause cancer.	
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Safety Data Sheet (SDS), USA

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.