### **RESILIENCE LS21600E NATURAL**

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# SAFETY DATA SHEET

### **RESILIENCE LS21600E NATURAL**

Section 1. Identification	on	
GHS product identifier	:	RESILIENCE LS21600E NATURAL
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	VC10012760
Product type	:	solid
<u>Relevant identified uses of the subs</u> Product use	stance :	e or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	POLYONE CORPORATION
		33587 Walker Road, Avon Lake, OH 44012
		1 (440) 930-1000 or 1 (866) POLYONE
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

# Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. All ingredients are bound in a PVC polymer matrix and potential for hazardous exposure as shipped is minimal. PVC resin is manufactured from Vinyl Chloride Monomer (VCM). PVC resin manufacturers take special efforts to strip residual VCM from their resins. Residual VCM in the resin is typically below 8.5 ppm. However, VCM is a known carcinogen. The end-user (fabricator) should take necessary precautions (mechanical ventilation, local exhaust, respiratory protection, etc.) to protect employees from exposure to any vapors or dusts that may be released during heating or fabrication. See Sections 8 and 11 for special precautions.After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.

#### GHS label elements

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Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.
Precautionary statements		
General	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.

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# Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	VC10012760

CAS number/other identifiers

Ingredient name	%	CAS number
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich	25 - 50	68515-48-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

#### Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

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Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated
		clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	Wash out mouth with water. Remove victim to fresh air and keep at
		rest in a position comfortable for breathing. If material has been
		swallowed and the exposed person is conscious, give small quantities
		of water to drink. Do not induce vomiting unless directed to do so by
		medical personnel. Get medical attention if symptoms occur.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Eye contact Inhalation Skin contact	<ul> <li>No known significant effects or critical hazards.</li> <li>No known significant effects or critical hazards.</li> <li>No known significant effects or critical hazards.</li> </ul>
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sympt	<u>oms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
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### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Specific treatments	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

# **Section 5. Firefighting measures**

#### **Extinguishing media**

Suitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or $CO_2$ .
Unsuitable extinguishing media	:	None known.

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Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal decomposition products	:	May emit Hydrogen Chloride (HCl). Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For emergency responders	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containme	ent ai	nd cleaning up
Small spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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# Section 7. Handling and storage

### Precautions for safe handling

Protective measures Advice on general occupational hygiene	:	Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

Ingredient name	Exposure limits
1,2-Benzenedicarboxylic acid, di-C8-10- branched alkyl esters, C9-rich	None.
Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end



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Eye/face protection	:	of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

# Section 9. Physical and chemical properties

#### Appearance

Physical state	:	solid [Pellets.]
Color	:	NO PIGMENT
Odor	:	Not available.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.
(flammable) limits		Upper: Not available.

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Vapor pressure	:	Not available.
Vapor density	:	Not available.
<b>Relative density</b>	:	Not available.
Solubility	:	Not available.
Solubility in water	:	Not available.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: Not available.
		Kinematic: Not available.

# Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Avoid contact with acetal homopolymers and acetyl homopolymers during processing.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

#### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,2-Benzenedicarboxylic acid,	di-C8-10-branched	alkyl esters, C9-rich		
	LD50 Oral	Rat	10,000 mg/kg	-
Remarks - Inhalation:	No applicable toxic	city data		
Remarks - Dermal:	No applicable toxic	city data		
Conclusion/Summary	• Mixtu	re Not fully tested		

**Conclusion/Summary** : Mixture.Not fully tested.

### Irritation/Corrosion



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Product/ingredient name	Result	Species	Score	Exposure	Observation
1,2-Benzenedicarboxylic	Eyes - Mild	Rabbit			-
acid, di-C8-10-branched	irritant				
alkyl esters, C9-rich					
Conclusion/Summary		Cartana Nat fai	1		
Skin Eyes		lixture.Not ful lixture.Not ful			
Respiratory		lixture.Not ful			
Respiratory	• 10		ily tostod.		
Sensitization					
<b>Conclusion/Summary</b>					
Skin		lixture.Not ful			
Respiratory	: N	lixture.Not ful	lly tested.		
<b>Mutagenicity</b>					
Conclusion/Summary	: N	lixture.Not ful	lly tested.		
<b>Carcinogenicity</b>					
Conclusion/Summary	: N	lixture.Not ful	lly tested.		
<u>Reproductive toxicity</u>					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
<b>Teratogenicity</b>					
Conclusion/Summary	: N	lixture.Not fu	lly tested.		
Specific target organ toxicit Not available.	ty (single exposu	<u>re)</u>			
<b>Specific target organ toxicit</b> Not available.	ty (repeated exp	<u>osure)</u>			
Aspiration hazard Not available.					
Information on likely routes exposure	of : N	ot available.			
Potential acute health effect	<u>s</u>				



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Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure
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Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		
Potential immediate effects Potential delayed effects	:	Not available. Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

# Section 12. Ecological information



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#### **Toxicity**

Product/ingredient name	Result	Species	Exposure		
1,2-Benzenedicarboxylic acid,	di-C8-10-branched alkyl e	sters, C9-rich			
Remarks - Acute - Fish:	No applicable toxicity da	ta			
Remarks - Acute - Aquatic invertebrates.:	No applicable toxicity da	ta			
Remarks - Acute - Aquatic plants:	No applicable toxicity da	ta			
Remarks - Chronic - Fish:	No applicable toxicity data				
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data				
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Remarks - Acute - Aquatic invertebrates.:	Chemicals are not readily	v available as they are bound with	hin the polymer matrix.		
Conclusion/Summary	: Chemicals a polymer mat	re not readily available as they a rix.	re bound within the		

### Persistence and degradability

**Conclusion/Summary** 

Chemicals are not readily available as they are bound within the polymer matrix.

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
1,2-Benzenedicarboxylic acid, di-C8-	8.8	3.00	low
10-branched alkyl esters, C9-rich			

#### **Mobility in soil**

:	Not available.
:	No known significant effects or critical hazards.
	:

:

# Section 13. Disposal considerations

<b>Disposal methods</b> : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental	
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protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

# Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Consult mode specific transport rules
International Water IMO/IMDG	:	Consult mode specific transport rules

# Section 15. Regulatory information

U.S. Federal regulations	c T	Jnited States - TSCA 12(b) - Chemical export notification: None of the components are listed. Jnited States - TSCA 4(a) - Final Test Rules: Listed 1,2- Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich
	נ נ נ	Jnited States - TSCA 4(a) - ITC Priority list: Not listed Jnited States - TSCA 4(a) - Proposed test rules: Not listed Jnited States - TSCA 4(f) - Priority risk review: Not listed Jnited States - TSCA 5(a)2 - Final significant new use rules: Listed 4-Nonylphenol, branched
	N	Jnited States - TSCA 5(a)2 - Proposed significant new use rules: Not listed Jnited States - TSCA 5(e) - Substances consent order: Not listed

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		United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined United States - TSCA 8(a) - Preliminary assessment report (PAIR): Listed 4-Nonylphenol, branched
		United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed
		United States - TSCA 8(d) - Health and safety studies: Not listed
		United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed 2-Ethylhexanoic acid zinc salt
		Zinc chloride (ZnCl2)
		Phenol
		Vinyl chloride monomer
		United States - EPA Clean water act (CWA) section 311 - Hazardous substances: Listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	:	Listed
Clean Air Act Section 602 Class I Substances	:	Not listed
Clean Air Act Section 602 Class II Substances	:	Not listed
DEA List I Chemicals (Precursor Chemicals)	:	Not listed

#### US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

DEA List II Chemicals (Essential

### SARA 311/312

**Chemicals**)

Classification

Not applicable. :

Not listed

:



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#### **Composition/information on ingredients**

No products were found.

Name	%	Classification
1,2-Benzenedicarboxylic	>= 25 - <= 50	EYE IRRITATION - Category 2B
acid, di-C8-10-branched		
alkyl esters, C9-rich		

### <u>SARA 313</u>

Not applicable.

State regulations	
Massachusetts	: None of the components are listed.
New York	: None of the components are listed.
New Jersey	: The following components are listed: Calcium carbonate
Pennsylvania	<ul><li>Ethene, chloro-, homopolymer</li><li>The following components are listed: Calcium carbonate</li></ul>

### California Prop. 65

**WARNING:** This product can expose you to 1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
1,2-Benzenedicarboxylic acid, di-C8-10- branched alkyl esters, C9-rich	No.	No.

United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	At least one component is not listed in DSL but all such components are listed in NDSL.
International regulations		
Inventory list		
Australia	:	Not determined.
Canada	:	At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	Not determined.
Europe inventory	:	All components are listed or exempted.
Japan	:	Not determined.
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New Zealand Philippines Republic of Korea Taiwan Turkey United States	::	Not determined. Not determined.
United States	:	All components are listed or exempted.

# Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual. History

History		
Date of printing	:	12/21/2022
Date of issue/Date of revision	:	05/10/2019
Date of previous issue	:	00/00/0000
Version	:	1.0
Key to abbreviations	:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
References	:	UN = United Nations Not available.
Notice to reader		

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To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.