...

## SAFETY DATA SHEET

## RAVIN 410 INTERMEDIATE PVC

....

...

Version Number 1.10 Revision Date 03/11/2025



Page 1 of 15 Print Date 04/12/2025

# SAFETY DATA SHEET

## **RAVIN 410 INTERMEDIATE PVC**

Section 1. Identificati	on	
GHS product identifier	:	RAVIN 410 INTERMEDIATE PVC
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10107193
Product type	:	solid
Relevant identified uses of the sub	stance	or mixture and uses advised against
Product use	:	Industrial applications. Plastics.
Supplier's details	:	AVIENT CORPORATION 33587 Walker Road, Avon Lake, OH 44012
		1 (440) 930-1000 or 1 (844) 4AVIENT
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		

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025



Page 2 of 15 Print Date 04/12/2025

Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.
Precautionary statements		
	:	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.

# Section 3. Composition/information on ingredients

Not available.

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10107193

CAS number/other identifiers

Ingredient name	%	CAS number
1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters,	>= 10 - <= 25	68515-48-0
C9-rich		
Carbon black	>= 10 - <= 25	1333-86-4

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.

# RAVIN 410 INTERMEDIATE PVC



Version Number 1.10 Revision Date 03/11/2025

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. 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 Ingestion Over-exposure signs/symptoms	<ul> <li>No known significant effects or critical hazards.</li> </ul>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate medica	al attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: 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. Fire-fighting measures**

## Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or CO <sub>2</sub> . None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025



Page 4 of 15 Print Date 04/12/2025

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	nt aı	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.

# Section 7. Handling and storage

## Precautions for safe handling

# RAVIN 410 INTERMEDIATE PVC



Version Number 1.10 Revision Date 03/11/2025 Page 5 of 15 Print Date 04/12/2025

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.
Carbon black	OSHA PEL 1989 (1989-03-01) TWA 3.5 mg/m3 OSHA PEL (1993-06-30) TWA 3.5 mg/m3 NIOSH REL (1994-06-01) TWA 3.5 mg/m3 NIOSH REL (1994-06-01) TWA 0.1 mgPAH/m <sup>3</sup> ACGIH TLV (2010-12-06) TWA 3 mg/m3 Form: Inhalable fraction

Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025



Page 6 of 15 Print Date 04/12/2025

		necessary to reduce emissions to acceptable levels.
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 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.
Eye/face protection	:	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	:	BLACK
Odor	:	Not available.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not applicable.

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025



Page 7 of 15 Print Date 04/12/2025

Burning time Burning rate Evaporation rate Flammability (solid, gas) Lower and upper explosive (flammable) limits	<ul> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Lower: Not applicable.</li> <li>Upper: Not applicable.</li> </ul>
Vapor pressure Vapor density	<ul><li>Not available.</li><li>Not applicable.</li></ul>
Relative density Solubility Solubility in water Partition coefficient: n- octanol/water Auto-ignition temperature	<ul> <li>Not available.</li> <li>Not available.</li> <li>Not available.</li> <li>Not applicable.</li> <li>Not applicable.</li> </ul>
Decomposition temperature SADT Viscosity	<ul> <li>Not available.</li> <li>Not available.</li> <li>Dynamic: Not available.</li> <li>Kinematic: Not applicable.</li> </ul>

# 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

## Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure



# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025

## Page 8 of 15 Print Date 04/12/2025

1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich					
	LD50 Oral	Rat	10,000 mg/kg	-	
Carbon black					
	LD50 Oral	Rat	15,400 mg/kg	-	

Conclusion/Summary

: Mixture.Not fully tested.

## Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,2-Benzenedicarboxylic	Eyes - Mild irritant	Rabbit	-		-
acid, di-C8-10-branched					
alkyl esters, C9-rich					

Conclusion/Summary Skin Eyes Respiratory <u>Sensitization</u>	<ul><li>Mixture.Not fully tested.</li><li>Mixture.Not fully tested.</li><li>Mixture.Not fully tested.</li></ul>
Conclusion/Summary Skin Respiratory	<ul><li>Mixture.Not fully tested.</li><li>Mixture.Not fully tested.</li></ul>
<u>Mutagenicity</u>	
Conclusion/Summary	: Mixture.Not fully tested.
<b>Carcinogenicity</b>	
Conclusion/Summary	: Mixture.Not fully tested.

**Classification** 

Product/ingredient name	OSHA	IARC	NTP
Carbon black	-	2B	-

## **Reproductive toxicity**

Conclusion/Summary	:	Mixture.Not fully tested.
<u>Teratogenicity</u>		
Conclusion/Summary	:	Mixture.Not fully tested.

a

....

# SAFETY DATA SHEET

# **RAVIN 410 INTERMEDIATE PVC**

. . . . . . .

Version Number 1.10 Revision Date 03/11/2025



Page 9 of 15 Print Date 04/12/2025

Specific target organ toxicity (single exposure) Not available.				
Specific target organ toxicity (repeated exposure) Not available.				
Aspiration hazard Not available.				
Information on the likely routes of exposure	:	Not available.		
Potential acute health effects				
Eye contact Inhalation Skin contact Ingestion	::	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.		
Symptoms related to the physical, che	<u>emic</u>	cal and toxicological characteristics		
Eye contact Inhalation Skin contact Ingestion	::	No specific data. No specific data. No specific data. No specific data.		
Delayed and immediate effects and al	<u>so c</u>	hronic effects from short and long term exposure		
Short term exposure				
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 Carcinogenicity Mutagenicity Teratogenicity Developmental effects	::	No known significant effects or critical hazards. No known significant effects or critical hazards.		

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025

# **ÀVIENT**

Page 10 of 15 Print Date 04/12/2025

Fertility effects	:	No known significant effects or critical hazards. No known significant effects or critical hazards.
Numerical measures of toxicity		
<u>Acute toxicity estimates</u> N/A		
Other 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.

# Section 12. Ecological information

## **Toxicity**

Result	Species	Exposure
	· -	
Acute EC50 37.563 Mg/l Fresh water	Daphnia - Daphnia magna	48 h
PVC		
Chemicals are not readily available	e as they are bound within the po	olymer matrix.
: Chemicals are not readi polymer matrix.	ly available as they are bound w	ithin the
: Chemicals are not read polymer matrix.	ily available as they are bound v	vithin the
: Chemicals are not read polymer matrix.	ily available as they are bound v	vithin the
	Acute EC50 37.563 Mg/l Fresh water PVC Chemicals are not readily available : Chemicals are not readi polymer matrix. : Chemicals are not read polymer matrix.	Acute EC50 37.563 Mg/l Fresh water       Daphnia - Daphnia magna         PVC       Chemicals are not readily available as they are bound within the polymer matrix.         :       Chemicals are not readily available as they are bound w polymer matrix.         :       Chemicals are not readily available as they are bound w polymer matrix.         :       Chemicals are not readily available as they are bound w polymer matrix.

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

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025



Page 11 of 15 Print Date 04/12/2025

#### Mobility in soil

Soil/water partition coefficient : Not available. (KOC)

:

Other adverse effects

No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** 

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 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 : United States - TSCA 12(b) - Chemical export notification: None of the components are listed.

11/15

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025



Page 12 of 15 Print Date 04/12/2025

United States - TSCA 4(a) - Final Test Rules: Listed 1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich

United States - TSCA 4(a) - ITC Priority list: Not listed

United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not listed United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed United States - TSCA 5(e) - Substances consent order: Not listed 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): Not listed 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 Zinc stearate Vinvl chloride monomer United States - EPA Clean water act (CWA) section 311 -Hazardous substances: Not 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:** 

Clean Air Act Section 112(b)	:
Hazardous Air Pollutants (HAPs)	
Clean Air Act Section 602 Class I	:
Substances	
Clean Air Act Section 602 Class II	:
Substances	
DEA List I Chemicals (Precursor	:
Chemicals)	
DEA List II Chemicals (Essential	:
Chemicals)	

- Listed
- Not listed

Not listed

- Not listed
- Not listed
  - Not listed

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025



Page 13 of 15 Print Date 04/12/2025

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

not applicable

## SARA 311/312

Classification

Not applicable.

:

## **Composition/information on ingredients**

No products were found.

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

Not applicable.

State regulations	
Massachusetts	: The following components are listed:
	Calcium carbonate
	Carbon black
New York	: None of the components are listed.
New Jersey	: The following components are listed:
	Ethene, chloro-, homopolymer
	Calcium carbonate
	Carbon black
Pennsylvania	: The following components are listed:
	Calcium carbonate
	Carbon black

## California Prop. 65

This product contains substance(s) listed on Proposition 65 but are encapsulated in a polymer matrix and not in their pure form. The end user of this product is responsible for determining appropriate warnings based upon their processing, or during installation or use of the end article.

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

## RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025

# **ÀVIENT**

Page 14 of 15 Print Date 04/12/2025

Carbon black		
Carbon black		
United States inventory (TSCA 8b)	:	All components are active or exempted.
Canada inventory	:	At least one component is not listed in DSL but all such components are listed in NDSL.
<u>International regulations</u> Inventory list		
Australia	:	All components are listed or exempted.
Canada	:	At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	All components are listed or exempted.
Eurasian Economic Union	:	Russian Federation inventory: Not determined.
Japan	:	Japan inventory (CSCL): Not determined.
		Japan inventory (ISHL): Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	Not determined. All components are listed or exempted.
Thailand	:	All components are listed or exempted.
Turkey	:	All components are listed or exempted.
United States	:	All components are active or exempted.
Viet Nam	:	Not determined.

# **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

Date of printing	:	04/12/2025
Date of issue/Date of revision	:	03/11/2025

# RAVIN 410 INTERMEDIATE PVC

Version Number 1.10 Revision Date 03/11/2025



Page 15 of 15 Print Date 04/12/2025

Date of previous issue	:	03/21/2018
Version	:	1.10
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 = Intermediate Bulk Container
		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)
		UN = United Nations
References	:	Not available.

#### Notice to reader

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.