SAFETY DATA SHEET
according to the OSHA Hazard Communication Standard

CAPV_163

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	11-18-2024	R00000000273	Date of first issue: 11-18-2024

BLUE CUBE OPERATIONS LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

SECTION 1. IDENTIFICATION

Product name : CAPV_163

Manufacturer or supplier's details

Company name of supplier : BLUE CUBE OPERATIONS LLC
Address : 190 CARONDELET PLAZA, SUITE 1530
CLAYTON MO 63105-3467
Telephone : (844) 238-3445
E-mail address : INFO@OLIN.COM
24-Hour Emergency Contact : +1 800 424 9300
Local Emergency Contact : 1-800-424-9300

Recommended use of the chemical and restrictions on use

Identified uses : Raw material for the plastics industry.
Recommended use : Manufacture of articles by injection and extrusion

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Combustible dust

GHS label elements

Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance
Substance name : poly(vinyl chloride)

CAS-No. : 9002-86-2

Synonyms : PVC Resin

Components

Chemical name	CAS-No.	Concentration (% w/w)
Poly (vinyl chloride)	9002-86-2	100

SECTION 4. FIRST AID MEASURES

If inhaled	:	Move person to fresh air; if effects occur, consult a physician. If breathing is difficult, oxygen should be administered by qualified personnel.
In case of skin contact	:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly. Cool skin rapidly with cold water after contact with molten material. Do not remove solidified product. Consult a physician.
In case of eye contact	:	Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.
If swallowed	:	If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	None known.
Protection of first-aiders	:	If potential for exposure exists refer to Section 8 for specific personal protective equipment. Avoid inhalation, ingestion and contact with skin and eyes.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray
Unsuitable extinguishing media	:	High volume water jet
Hazardous combustion products	:	Fire conditions may cause this product to decompose. Refer to section 10 - Thermal Decomposition. Hazardous combustion by-products may include butare not limited to carbon dioxide and carbon monoxide.
Further information	:	Eliminate ignition sources. Control fire by using large volumes of fine water spray.
Special protective equipment for fire-fighters	:	In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid breathing dust. Wear respiratory protection. Do not handle until all safety precautions have been read and understood. Avoid dust formation. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions	:	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
Methods and materials for containment and cleaning up	:	Collect with vacuum equipment. Sweep up and shovel into suitable containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Avoid dusting. Under dusty conditions avoid all sources of ignition, including sparks and static electricity.
Advice on safe handling	:	Use adequate ventilation and/or engineering controls in high temperature processing to prevent exposure to vapors. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Powdered material may form explosive dust-air mixture. Minimize dust generation and accumulation. Keep away from heat, sparks and flame. Ensure all equipment is electrically grounded before beginning transfer operations.
Conditions for safe storage	:	Good housekeeping and controlling of dusts are necessary for safe handling of product. Store at ambient temperature. Do not expose to temperatures exceeding 60 °C/ 140 °F.
Further information on storage conditions	:	Store in a cool, dry, well ventilated place. To ensure long-term storage flowability, it is recommended to avoid direct sunlight or prolonged periods of high temperatures. Avoid additional load by stacked pallets.
Recommended storage temperature	:	36 - 113 °F / 2 - 45 °C
Storage period	:	15 Months
Further information on storage stability	:	Stable under normal conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	:	Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

Personal protective equipment

Respiratory protection	:	Effective dust mask
Filter type	:	Particulate filter, type P2. In case of insufficient ventilation, wear suitable respiratory equipment. In the case of hazardous fumes, wear self contained

breathing apparatus.

Hand protection
Material : Protective equipment only chosen according to specific regulatory requirements after a risk assessment.

Material : Neoprene gloves

Eye protection : Protective equipment only chosen according to specific regulatory requirements after a risk assessment.
For dusty operations or when handling solutions of the material, wear chemical goggles.
For the molten form:
Safety glasses

Skin and body protection : protective suit

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Powder
Color	:	white
Odor	:	slight
Odor Threshold	:	No data available
pH	:	No data available
Melting point/range	:	No data available
Freezing point		No data available
Boiling point/boiling range	:	No data available
Flash point	:	Not applicable
Evaporation rate	:	No data available
Flammability (solid, gas)	:	May form combustible dust concentrations in air.
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Bulk density	:	450 - 650 kg/m3 (68 °F / 20 °C)
Solubility(ies)		

Water solubility	:	Insoluble (68 °F / 20 °C)
Autoignition temperature	:	ca. 716 °F / 380 °C
Decomposition temperature	:	Decomposes on heating. During a fire, irritating and highly toxic gases and/or fumes may be generated during combustion or decomposition.
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Particle characteristics		
Particle size	:	100 - 200 µm

Note: These are the Reference Points for these Physical Properties listed above, unless otherwise noted in their respective Physical Property value information: Boiling Point at 760 mmHg; Evaporation Rate Butyl Acetate = 1; Relative Vapor Density Air = 1; and Relative Density Water = 1.
NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	Stable under recommended storage conditions. See Storage, Section 7.
Possibility of hazardous reactions	:	Dust can form an explosive mixture in air.
Conditions to avoid	:	Avoid temperatures above 60 °C Heat, flames and sparks. Exposure to moisture.
Incompatible materials	:	None known.
Hazardous decomposition products	:	Hydrogen chloride gas Hydrocarbons. Carbon oxides other toxic products

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Components:

Poly (vinyl chloride):

Acute oral toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male and female): > 5 mg/l

Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,000 mg/kg
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Components:

Poly (vinyl chloride):

Result : No skin irritation
Remarks : Brief contact is essentially nonirritating to skin.

Serious eye damage/eye irritation

Components:

Poly (vinyl chloride):

Result : No eye irritation
Remarks : Essentially nonirritating to eyes.
Corneal injury is unlikely.

Respiratory or skin sensitization

Components:

Poly (vinyl chloride):

Assessment : Does not cause skin sensitization.
Remarks : Did not demonstrate the potential for contact allergy in mice.

Remarks : For respiratory sensitization:
No relevant data found.

Germ cell mutagenicity

Components:

Poly (vinyl chloride):

Genotoxicity in vitro : Remarks: In vitro genetic toxicity studies were negative.
Animal genetic toxicity studies were negative.

Carcinogenicity

Components:

Poly (vinyl chloride):

Remarks : Did not cause cancer in laboratory animals.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Components:

Poly (vinyl chloride):

Effects on fertility : Remarks: In animal studies, did not interfere with fertility.
In animal studies, did not interfere with reproduction.

Effects on fetal development : Remarks: Did not cause birth defects or any other fetal effects in laboratory animals.

STOT-single exposure

Components:

Poly (vinyl chloride):

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

STOT-repeated exposure

Components:

Poly (vinyl chloride):

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Poly (vinyl chloride):

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Aspiration toxicity

Components:

Poly (vinyl chloride):

Based on physical properties, not likely to be an aspiration hazard.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Poly (vinyl chloride):

Toxicity to fish : Remarks: Not expected to be acutely toxic to aquatic organisms.

Remarks: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50 (Brachydanio rerio (zebrafish)): > 100 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203

Persistence and degradability

Components:

Poly (vinyl chloride):

Biodegradability : Remarks: No appreciable biodegradation is expected. Surface photodegradation is expected with exposure to sunlight.

Bioaccumulative potential

Components:

Poly (vinyl chloride):

Partition coefficient: n-octanol/water : Remarks: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

Mobility in soil

Components:

Poly (vinyl chloride):

Distribution among environmental compartments : Remarks: No relevant data found.

Other adverse effects

Components:

Poly (vinyl chloride):

Results of PBT and vPvB assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL.
Refer to all federal, state and local regulations prior to disposition of container and unused contents by reuse, recycle, or disposal.
All efforts to recycle material should be made.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

49 CFR Road
Not regulated as a dangerous good

Special precautions for user
Not applicable

SECTION 15. REGULATORY INFORMATION

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65
WARNING: This product can expose you to chemicals including Vinyl chloride, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

International Regulations

Montreal Protocol : Not applicable

Rotterdam Convention (Prior Informed Consent) : Not applicable

Stockholm Convention (Persistent Organic Pollutants) : Not applicable

The ingredients of this product are reported in the following inventories:

TCSI	:	All intentional components are listed on the inventory, are exempt, or are supplier certified.
TSCA	:	All substances listed as active on the TSCA Inventory or are not required to be listed.
AIIC	:	All intentional components are listed on the inventory, are exempt, or are supplier certified.
DSL	:	All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.
ENCS	:	All intentional components are listed on the inventory, are exempt, or are supplier certified.
ISHL	:	All intentional components are listed on the inventory, are exempt, or are supplier certified.
KECI	:	All intentional components are listed on the inventory, are exempt, or are supplier certified.
PICCS	:	All intentional components are listed on the inventory, are exempt, or are supplier certified.
IECSC	:	All intentional components are listed on the inventory, are exempt, or are supplier certified.
NZIoC	:	not determined
CH INV	:	not determined
TECI	:	All intentional components are listed on the inventory, are exempt, or are supplier certified.

TSCA list

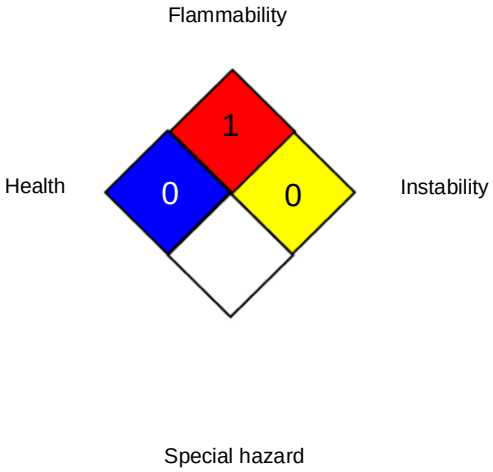
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:



Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act

(United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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BLUE CUBE OPERATIONS LLC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given.Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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