

AV-259-MV PermaFlex AC™**SECTION 1. IDENTIFICATION**

Product Identifier	AV-259-MV PermaFlex AC™
Other Means of Identification	Catalyst for hydrophobic grout
Recommended Use	Industrial Use Only.
Restrictions on Use	Not applicable.
Manufacturer/Supplier	Avanti International, 822 Bay Star Blvd, Webster, TX, 77598, USA, 281.486.5600,
Emergency Phone No.	ChemTrec 800.424.9300
Date of Preparation	February 14, 2023

SECTION 2. HAZARD IDENTIFICATION

Classified according to the US Hazard Communication Standard (HCS 2012) and Canada's Hazardous Products Regulations (WHMIS 2015).

Classification: Acute toxicity (Oral) - Category 4; Skin irritation - Category 2; Eye irritation - Category 2A; Skin sensitization - Category 1; Specific target organ toxicity (repeated exposure) - Category 2

Label Elements

Hazard pictogram:



Signal word:

Warning

Hazard statements:

H302 + H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H373 May cause damage to organs (kidneys) through prolonged or repeated exposure if inhaled and/or swallowed.

Precautionary Statements

Prevention:

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands and skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear eye protection/face protection.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water/soap

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice or attention if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice or attention.

P337 + P313 If eye irritation persists: Get medical advice or attention.

P362 + P364 Take off contaminated clothing and wash it before reuse

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal: P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

Other hazards: None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Dibutyl maleate	105-76-0	40-70	DBM

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

SECTION 4. FIRST AID MEASURES

First Aid Measures

General advice: Get medical advice or attention if you feel unwell or are concerned.

Eye contact: Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

Skin contact: Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation or a rash occurs, get medical advice or attention.

Inhalation: Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell.

Ingestion: Rinse mouth with water. Get medical advice or attention if you feel unwell or are concerned.

Medical Conditions Aggravated by Exposure

Asthma, dermatitis, kidney conditions, respiratory conditions.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled and/or swallowed: can cause effects as described for inhalation. Can cause effects as described for skin contact.

Immediate Medical Attention and Special Treatment

Target organs Kidneys, respiratory system.

Specific treatments Monitor kidney function. Monitor cardiovascular function.

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing Media

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

Unsuitable: DO NOT use water or water-based extinguishing agents.

Specific Hazards Arising from the Product

Special hazards: Closed containers may rupture violently when heated releasing contents. Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

Special Protective Equipment and Precautions for Firefighters

Special firefighting procedures: Approach fire from upwind to avoid hazardous vapors or gases. Do NOT apply water directly to spill. Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

Environmental precautions: It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product. Dike spilled product to prevent runoff. Remove or recover liquid using pumps or vacuum equipment. Store recovered product in suitable containers that are: tightly-covered.

Other Information

Contact supplier, local fire and emergency services for help.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Obtain special instructions before use. Do not breathe in this product. Prevent skin contact. Do not get in eyes. Do not swallow. Avoid exposure during pregnancy and while nursing. Avoid generating vapors or mists. Avoid heating that will increase the amount of vapors. Wear personal protective equipment to avoid direct contact with this chemical.

Keep containers tightly closed when not in use or empty. General hygiene considerations: do NOT smoke in work areas. Do NOT eat, drink, or store food in work areas. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area. Consider using a double locker-shower facility. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely. Properly dispose of any contaminated items, including shoes, that cannot be decontaminated. DO NOT re-use.

Conditions for safe storage:

Store in an area that is: cool, well-ventilated.

Incompatible materials:

N/A

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters Not available

Appropriate engineering controls: Use local exhaust ventilation if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eyes/face protection: Wear chemical safety goggles and face shield when contact is possible.

Skin/hand protection: Wear chemical protective clothing e.g. gloves, aprons, boots. Wear a chemical splash suit and respiratory protection.
Suitable materials are: Chemical Resistant Gloves: butyl rubber, neoprene rubber, nitrile rubber, polyvinyl chloride, Viton®/butyl rubber. Chemical Resistant Suit: Barrier® (PE/PA/PE), Saranex®.

Body protection: Wear chemical protective clothing e.g. gloves, aprons, boots. Wear a chemical splash suit and respiratory protection.
Suitable materials are: Chemical Resistant Gloves: butyl rubber, neoprene rubber, nitrile rubber, polyvinyl chloride, Viton®/butyl rubber. Chemical Resistant Suit: Barrier® (PE/PA/PE), Saranex®.

Respiratory protection: Wear a NIOSH approved air-purifying respirator with an organic vapor cartridge. Either full-face piece or half-face piece with splash goggles.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear yellow liquid
Odor:	Pungent
Odor threshold:	Not available
pH:	Not available
Melting/freezing point:	Not available (melting); < 54 °F (12 °C) (freezing)
Initial boiling point and boiling range:	Not applicable
Flash point:	> 242.6 °F (117.0 °C)
Flash point method:	Not available
Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits:	Not available (upper); Not available (lower)
Vapor pressure:	Not available
Vapor density (air=1):	Not available
Relative density (water=1):	1.02
Solubility:	Slightly soluble in water
Partition coefficient n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available (kinematic); Not available (dynamic)

SECTION 10. STABILITY AND REACTIVITY

Reactivity:	None known
Chemical stability:	Normally stable
Possibility of hazardous reactions:	Reacts violently in presence of acidic conditions (low pH)
Conditions to avoid:	Sunlight. Incompatible materials. Acidic conditions (low pH).
Incompatible materials:	Reacts violently with organic acids (e.g. acetic acid), inorganic acids (e.g. hydrofluoric acid), oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid), strong oxidizing agents (e.g. perchloric acid).
Hazardous decomposition products:	Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation; skin contact; eye contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Dibutyl maleate		9300 mg/kg (mouse)	10010 mg/kg (rabbit)

Potential Chronic Health Effects

Interactive effects: No information was located

Skin corrosion or irritation: May cause moderate or severe irritation based on information for closely related materials.

Serious eye damage or irritation: May cause serious eye irritation based on information for closely related materials.

Respiratory and/or Skin sensitization: Respiratory sensitizer. Skin sensitizer.

Germ cell mutation: No information was located.

Carcinogenicity:

Chemical Name	IARC	ACGIH®	NTP	OSHA
Dibutyl maleate	Not Listed	Not Listed	Not Listed	Not Listed

Reproductive toxicity: Development of Offspring: No information was located.
Sexual Function and Fertility: May cause effects on sexual function and/or fertility.
Effects on or via Lactation: No information was located.

Aspiration hazard: No information was located.

Specific Target Organ Toxicity

Single exposure: Inhalation: May be harmful based on information for closely related materials.
Skin Absorption: May be harmful based on information for closely related materials.
Ingestion: May be harmful based on information for closely related materials

Repeated exposure: May cause harmful effects on the kidneys. Symptoms may include dry, red, cracked skin (dermatitis). Irritation of the respiratory system. May cause respiratory tract injury.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity Data

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Dibutyl maleate	0.6 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour)	21 mg/L (Daphnia magna (water flea); 48-hour)	6.2 mg/L (Desmodesmus subspicatus (algae); 72-hour)	

Persistence and degradability: No information was located.

Bioaccumulative potential: This product or its degradation products are expected to bioaccumulate.

Mobility in soil: If released into the environment, this product is not expected to move through the soil, based on physical and chemical properties.

Other adverse effects: There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose of contents and container in accordance with local, regional, national and international regulations. Dispose of or recycle empty containers through an approved waste management facility. Empty containers retain product residue. Follow label warnings even if container appears to be empty. Do not reuse empty containers.

Consult your local or regional authorities.
Refer to section 7 for handling precautions and to section 8 for information on personal protective equipment.

SECTION 14. TRANSPORT INFORMATION

Not regulated under US DOT Regulations. Not regulated under Canadian TDG regulations.

Regulatory Information

	UN No.	Proper Shipping Name	Transport Class	Packing Group
IMDG	3082	Environmentally Hazardous Substance, Liquid, N.O.S. (Dibutyl maleate)	9	III
IATA	3082	Environmentally Hazardous Substance, Liquid, N.O.S. (Dibutyl maleate)	9	III

Environmental Hazards Environmentally Hazardous Substance (Dibutyl maleate)

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Other Information Packages smaller than or equal to 5 kg / L, not dangerous goods of Class 9

SECTION 15. REGULATORY INFORMATION

United States - Toxic Substances Control Act

TSCA 8(B) inventory: All ingredients are listed on the TSCA Inventory.

California Proposition 65

Warning!

This product contains chemicals known to the state of California to cause cancer, at concentration lower 0.1%. This product contains up to 0.5% of a chemical known to the state of California to cause birth defect or other reproductive harm.

Canada - Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

CEPA DSL: All ingredients are listed on the DSL/NDSL.

SECTION 16. OTHER INFORMATION

NFPA Rating: Health - 0 Flammability - 1 Instability - 0

SDS Prepared By: Avanti International

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Revision Indicators:

Key to Abbreviations: ACGIH® American Conference of Governmental Industrial Hygienists

IARC International Agency for Research on Cancer

NFPA National Fire Protection Association

NTP National Toxicology Program

NIOSH National Institute for Occupational Safety and Health

OSHA US Occupational Safety and Health Administration

RTECS® Registry of Toxic Effects of Chemical Substances

References CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA").