

Capsaicin

Safety Data Sheet

1. Identification	
1.1 Product Identifier:	Capsaicin (Capsicum Oleoresin)
1.2 Supplier:	Aversion Technologies, Inc. 1125 West Street, Suite 328 Annapolis, Maryland 21401 USA +1-202-657-6300
1.3 Telephone:	
1.4 Emergency Telephone:	+1-202-365-9001 (24-Hour Emergency)
1.5 Web Address:	www.aversiontech.com
1.6 Product Form:	Powder
1.7 Intended Use:	Food Additive, Pharmaceutical Active, Repellent
1.8 Restrictions On Use:	None
2. Hazard(s) Identification	
2.1 Hazard Classification:	Acute Oral Toxicity, Category 4 Skin Irritation, Category 2 Eye Effects, Category 1
2.2 Signal Word	Danger 
2.3 Hazard Statement(s)	Will cause severe irritation to the respiratory system if inhaled Will cause severe irritation to the digestive system if ingested Will cause severe irritation if in contact with the eyes Will cause irritation and redness if in contact with the skin
3. Composition/Information About Ingredients	
3.1 Product Identifier:	Capsicum Oleoresin Powder, 95% Pure
3.2 CAS#:	404-86-4
3.3 TSCA:	TSCA 8(b) inventory: Capsaicin, Natural
3.4 Synonym:	(E)-8-Methyl-N-vanillyl-6-nonenamide
3.5 Chemical Name:	6-Nonenamide, (E)-N-[(4-hydroxy-3-methoxy-phenyl)methyl]-8-methyl
3.6 Chemical Formula:	C18H27NO3
4. First Aid Measures	
Inhalation:	Allow the victim to rest in a well-ventilated area. Seek immediate medical attention.
Serious Inhalation:	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.
Eye Contact:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.
Skin Contact:	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
Serious Skin Contact:	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Ingestion:	Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
5. Fire Fighting Measures	
Flammability of the Product:	May be combustible at high temperature.
Auto-Ignition Temperature:	Not available.
Flash Points:	Not available.
Flammable Limits:	Not available.
Products of Combustion:	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...).
Fire Hazards in Presence of Various Substances:	Not available.
Explosion Hazards in Presence of Various Substances:	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions:	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Personal Protection:	Self Contained breathing apparatus and full protective gear
6. Accidental Release Measures	
Small Spill:	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill:	Use a shovel to put the material into a convenient waste disposal container. Avoid raising and breathing dust. Adequately ventilate the area
7. Handling and Storage	
Precautions:	Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes

Storage:	Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.		
8. Exposure Controls			
Engineering Controls:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.		
Personal Protection:	Splash goggles, lab coat, dust respirator, gloves. Be sure to use an approved/certified respirator or equivalent.		
Personal Protection in Case of a Large Spill:	Splash goggles, full suit, dust respirator, boots, and gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.		
Exposure Limits:	Not available.		
9. Physical and chemical properties			
Physical state and appearance:	White Powder	Vapor Pressure:	Not applicable
Odor:	Distinctive odor	Vapor Density:	Not available
Taste:	Burning sensation	Volatility:	Not available
Molecular Weight:	305.41 g/mole	Odor Threshold:	Not available
Color:	White to off-white powder	Water/Oil Dist. Coeff.:	Capsaicin is more soluble in oil
pH (1% solution/water):	Not applicable	Ionicity (in Water):	Not available
Boiling Point:	210°C (410°F)	Dispersion Properties:	Insoluble in water
Melting Point:	65°C (149°F)	Solubility:	Easily soluble in methanol, diethyl ether. Insoluble in cold water
Critical Temperature:	Not available		
Specific Gravity:	Not available		
10. Stability and reactivity			
Stability:	The product is stable		
Conditions of Instability:	Excess heat, dust generation, incompatible materials		
Incompatibility with various substances:	Reactive with oxidizing agents		
Corrosivity:	Non-corrosive in presence of glass		
Polymerization:	No		
11. Toxicology information			
Routes of Entry:	Inhalation, ingestion, skin and eye contact.		
Toxicity to Animals:	Acute oral toxicity (LD50): 148.1 and 161.2 mg/kg (female and male rat, respectively) Acute dermal toxicity (LD50): 512 mg/kg (Mouse)		
Chronic Effects on Humans:	The substance is toxic to lungs, mucous membranes.		
Other Toxic Effects on Humans:	Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of skin contact (permeator), of inhalation.		
Potential Carcinogen	No.		
12. Ecological Information			
Ecotoxicity:	Not available		
BOD5 and COD:	Not available		
Products of Biodegradation:	Possibly hazardous short-term degradation products are not likely. However, long-term degradation products may arise.		
Toxicity of the Products of Biodegradation:	The products of degradation are more toxic.		
Special Remarks on the Products of Biodegradation:	Not available.		
13. Disposal Considerations			
Disposal Methods:	Dispose of in accordance with local authority requirements.		
14. Transport information			
DOT Classification:	CLASS 6.1: Poisonous material		
Identification:	Toxic solid, organic, n.o.s. (Capsaicin): UN2811 PG: III		
Special Provisions for Transport:	Not available		
			
15. Regulatory Information			
Federal and State Regulations:	TSCA 8(b) inventory: Capsaicin, Natural		
Other Regulations:			
OSHA:	Hazardous by definition of Hazard Communication Standard (29 CFR1910.1200).		
Other Classifications:			
WHMIS (Canada):	CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC).		
DSCL (EEC):	R38- Irritating to skin R41- Risk of serious damage to eyes		
HMIS (U.S.A.):	Health Hazard: 3 Fire Hazard: 1 Reactivity: 0 Personal Protection: E		
National Fire Protection Association (U.S.A.):	Health: 3 Flammability: 1 Reactivity: 0 Specific hazard:		
Protective Equipment:	Gloves, lab coat, dust respirator, splash goggles. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.		
16. Other Information			
DISCLAIMER: Every effort has been made to ensure that this information is accurate and up to date. Users are reminded that they should ensure that they have retained or internally circulated the most up to date copy as provided to the persons or work locations that require them. No warranty is implied or given as to suitability for use for any activity that is not covered by either the technical data sheet or restrictions of use as above.			