



Nonivamide Safety Data Sheet

Section 1 – Identification of the Substance and the Company/Undertaking	
Product Identifier:	Nonivamide
Supplier:	Aversion Technologies, Inc. 1125 West Street, Suite 328 Annapolis, Maryland 21401 USA +1-202-657-6300
Emergency Telephone Number:	+1-202-365-9001
Product Form:	Powder
Intended Use:	Pepper Sprays, Repellents
Restriction on Use:	None
Section 2 – Hazard(s) Identification	
2.1 Hazard Classification:	Acute toxicity (oral & inhalation), category 4 Eye damage / irritation, category 2A
2.2 Signal Word:	Danger
	
2.3 Hazard Statement(s):	Will cause severe irritation to the respiratory system if inhaled, severe irritation to the digestive system if ingested, severe irritation if in contact with the eyes, irritation and redness if in contact with the skin.
2.4 Precautionary Statement(s):	Avoid breathing dust. Wear protective gloves. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Section 3 – Composition/Information on Ingredients	
3.1 Chemical Name:	N-[(4-hydroxy-3-methoxyphenyl)methyl]nonanamide
3.2 Common Name:	Nonivamide
3.3 Synonyms:	N-vanillylnonanamide Pelargonic acid vanillylamide (PAVA)
3.4 CAS#:	2444-46-4
3.5 Composition:	100% Nonivamide
Section 4 – First Aid Measures	
Inhalation:	Remove from exposure immediately and introduce to fresh air.
Ingestion:	Rinse mouth thoroughly. Drink plenty of water.
Eye Contact:	Flush immediately with plenty of gently flowing clean water/saline, occasionally lifting eyelids until no evidence of chemical remains. Obtain medical attention immediately.
Skin Contact:	Remove contaminated clothing. Wash exposed areas with mild soap and water.
Section 5 – Fire Fighting Measures	
Suitable extinguishing media:	Dry chemical, CO2, water spray, regular foam.
Unsuitable extinguishing media:	DO NOT USE full water jet.
Special Fire Fighting Procedures:	This product does not pose a particular hazard.
Specific hazards arising from chemical:	None known
Tank/trailer/train truck fires:	Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in flames.
Section 6 – Accidental Release Measures	
Personal precautions:	Wear disposable gloves and overalls.
Environmental precautions:	No special precautions are necessary.
Waste disposal:	Powder should be dealt with in such a way as to prevent particles being spread in the air causing an unpleasant taste.
Section 7 – Handling and Storage	
Precautions:	While handling manually avoid contact with skin, eyes and clothing; minimize dust.
Storage:	Store in cool, dry, ventilated storage and closed containers. Keep separate from food, feed stuffs, fertilizers, and other sensitive materials.
Section 8 – Exposure Controls/Personal Protection	
Occupational Exposure Limits:	None Established
Appropriate engineering controls:	Provide local exhaust ventilation system or other engineering controls to keep the airborne concentrations below their respective threshold limit value. Check legal suitability of exposure level.
Respiratory Protection:	Respiratory protection: Wear NIOSH or European Standard EN 149 approved full or half face piece (with goggles) respiratory protective equipment.
Protective Gloves:	Wear appropriate chemical-resistant gloves
Eye Protection:	An eye wash unit and safety shower station should be available nearby work place.
Skin and Body Protection:	Wear appropriate protective chemical-resistant clothing.

Section 9 – Physical and Chemical Properties			
Physical state and appearance:	White Powder	Vapor Pressure:	Not applicable
Odor:	Mild odor	Vapor Density:	Not available
Taste:	Intense burning sensation	Volatility:	Not available
Molecular Weight:	293.41 g/mole	Odor Threshold:	Not available
Color:	White to off-white powder	Water/Oil Dist. Coeff.:	Nonivamide is more soluble in oil
pH (1% solution/water):	Not applicable	Ionicity (in Water):	Not available
Boiling Point:	492.7°C (918°F) @ 760mm Hg	Dispersion Properties:	Insoluble in water
Melting Point:	54-61°C (129-141°F)	Solubility:	Easily soluble in methanol, diethyl ether. Insoluble in cold water
Critical Temperature:	Not available		
Specific Gravity:	0.94600 @ 20°C		
Section 10 – Stability and Reactivity			
Stability:	Product is stable and inert		
Incompatibility (Materials to Avoid):	None known		
Conditions to Avoid:	Certain strong oxidizing agents such as Sodium Hypochlorite and Hydrogen Peroxide		
Possibility of hazardous reactions:	No dangerous reaction known under conditions of normal use.		
Hazardous decomposition products:	Nitrogen oxides are formed when denatonium benzoate decomposes on heating or when involved in fire		
Section 11 – Toxicology Information			
Acute oral toxicity LD50 rat:	> 500 mg/kg (Rat)		
Dermal LD50 rabbit:	> 2000 mg/kg		
Acute inhalation toxicity:	> 1500 mg/kg (May cause asthmatic reaction in persons allergic to Lignocaine or similar)		
Skin irritation:	Low skin sensitivity potential and therefore may be mildly irritating to skin		
Eye irritation (rabbit):	No data available		
Sensitization (guinea pig):	No data available		
Genotoxicity and Reproductive Effects:	No data available		
Ames test:	No data available		
Specific target organ toxicity - single exposure:	No data available		
Specific target organ toxicity - repeated exposure:	No data available		
Aspiration hazard:	No data available		
Additional information:	No data available		
Further data:	Handle using good occupational and environmental health practices.		
Section 12 – Ecological Information			
Biodegradation:	Difficult to biodegrade		
Recycle:	Can be recycled with appropriate technologies.		
Section 13 – Disposal Considerations			
Disposal Methods:	Incinerate in authorized facility or dispose of in accordance with local regulations		
Section 14 – Transport Information			
General:	CLASS 6.1: Poisonous Material		
Identification:	Toxic solid, organic, n.o.s. (Capsaicin): UN2811 PGIII		
UN No:	2811		
Special Provisions for Transport:	Not available		
EINECS Number:	219-484-1		
CAS No:	2444-46-4		
Tariff No:	2924.2995		
Section 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.		
Section 16 – Other Information			
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