

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

COMPANY NAME:	AMERICAN INDUSTRIES, INC.	PRODUCT NAME:	MANDRON
ADDRESS LINE 1:	4300 Kahn Drive, Box 1405	PRODUCT CODE:	2268
ADDRESS LINE 2:	Lumberton, NC 28359-1405 USA	PRODUCT USE:	All-Natural Citrus Solvent
TELEPHONE NUMBERS:	800-753-5153 (or) 910-738-7224	SDS FILE ID:	2268.10
EMERGENCY PHONE:	CHEMTREC 1-800-424-9300	SDS DATE:	2023-09-28

Replaces Version dated: 2015-06-01 *and all prior versions*

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification:

Health	Skin irritation	Category 2
	Skin Sensitivity	Category 1
	Aspiration Toxicity	Category 1
Physical	Flammable Liquid	Category 3

Label elements



Signal word: **Danger**

Hazard statements:
H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing mist, vapors, or spray.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P331 Do NOT induce vomiting.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use foam, powder, or carbon dioxide for extinction.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical name</u>	<u>CAS number</u>	<u>%</u>
D-limonene	5989-27-5	> 94.0

SECTION 4: FIRST AID MEASURES

Inhalation: Supply fresh air; consult doctor in case of complaints. In case of unconsciousness place patient stably in side position for transportation.

Skin contact	Immediately remove any clothing soiled by the product. Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
Eye contact	Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Ingestion	Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help.
Acute effects	Allergic reactions; Irritant to skin and mucous membranes.; Dizziness; Breathing difficulty; Gastric or intestinal disorders
Danger	May be fatal if swallowed and enters airways. Danger of impaired breathing. Repeated exposure may cause skin dryness or cracking.
Indication of immediate medical attention and special treatment needed	If swallowed, gastric irrigation with added, activated carbon. If swallowed or in case of vomiting, danger of entering the lungs. If necessary oxygen respiration treatment. Later observation for pneumonia and pulmonary edema. Contains d-limonene. May produce an allergic reaction. Treat skin and mucous membrane with antihistamine and corticoid preparations.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use Fire-extinguishing powder, carbon dioxide, foam, water fog / haze.
Unsuitable extinguishing media	Water stream.
Hazards from substance or mixture	Formation of toxic gases is possible during heating or in case of fire.
Fire fighting equipment	Wear self-contained respiratory protective device. Wear fully protective suit.
Additional Information	Eliminate all ignition sources if safe to do so. Cool endangered containers with water fog.

SECTION 6: ACCIDENTAL RELEASE MEASURES

· Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat.

· Environmental precautions

Do not allow to enter sewers/ surface or ground water. Prevent from spreading (e.g. by damming-in or oil barriers). Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles.

· Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

Handling	Open and handle receptacle with care. Keep out of reach of children. Use only in well ventilated areas. Avoid splashes or spray in enclosed areas. Keep away from heat and direct sunlight. Rags, metal wools / cuttings / shavings and waste papers soaked with product must be placed in a sealed metal container rated for flammable waste. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Flammable gas-air mixtures may be formed in empty containers/receptacles. The product forms flammable fumes when heated.
Storage	Store in cool, dry conditions in well sealed receptacles. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	No relevant information available.
General protective and hygienic measures	The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.
Personal Protective Equipment:	
Eyes	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.
Skin	Protective neoprene gloves; Nitrile rubber, NBR

Clothing	Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items
Respirators	Not required under normal conditions of use. Use suitable respiratory protective device in case of insufficient ventilation. Use suitable respiratory protective device when aerosol or mist is formed. NIOSH or EN approved organic vapor respirator equipped with a dust/mist prefilter should be used.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Color	Colorless to light yellow
Form	Liquid
Odor	Citrus Odor
Flash point	51 °C (123.8 °F)
Flammability (solid, gaseous)	N/A
Decomposition temperature	N/D
Boiling point	176 °C (348.8 °F)
Melting point	-96 °C (-140.8 °F)
Auto-ignition temperature	245 °C (473 °F)
Explosion limits	Lower: 0.7 Vol % Upper: 6.1 Vol %
Vapor pressure	2.3 hPa (1.7 mm Hg)
Vapor density	N/D
Relative density	0.84
Evaporation rate	N/D
Specific gravity	
Water solubility/miscibility @ 25 °C (77 °F):	5.69 mg/l; Not miscible or difficult to mix
Partition coefficient (n-octanol/water)	N/D
pH	N/D
Viscosity	Dynamic @ 25 °C (77 °F): 0.846 mPas Kinematic: N/D

SECTION 10: STABILITY AND REACTIVITY

Chemical stability	Stable under normal use and temperature conditions.
Conditions to avoid	Excessive heat
Possibility of hazardous reactions	Flammable. Used empty containers may contain product gases which form explosive mixtures with air. Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized. Toxic fumes may be released if heated above the decomposition point.
Incompatible materials	Oxidizers
Hazardous decomposition products	Under fire condition only: carbon monoxide and carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:**
5989-27-5 d-limonene
Oral LD50 >2000 mg/kg (rat, female)
- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Sensitization possible through skin contact.
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer):**
Substance is not listed.
- **NTP (National Toxicology Program):**
Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration):**
Substance is not listed.
- **Probable route(s) of exposure:**
Ingestion, Inhalation, Eye contact, Skin contact.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification
- **Aspiration hazard:** May be fatal if swallowed and enters airways.

SECTION 12: ECOLOGICAL INFORMATION

Aquatic toxicity: Very toxic to aquatic life with long lasting effects.

5989-27-5 d-limonene

LC50 <1 mg/l (pimephales promelas)

EC50 0.307 mg/l (daphnia)

Persistence and degradability No relevant information available.

Bioaccumulative potential: No relevant information available.

Mobility in soil: No relevant information available.

Additional ecological information

General notes: Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded. Avoid transfer into the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

SECTION 14: TRANSPORT INFORMATION

US DOT For Quantities Greater Than 66 Lbs Per Package

Proper shipping name Combustible Liquid, N. O. S. (D-Limonene)

Hazard Class Comb Liq

NA Number 1993

Packaging Group III

US DOT Quantities Less Than 66 Lbs Per Package

Proper shipping name Not Regulated.

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Comprehensive Environmental Response and Liability Act (CERCLA)

This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

SARA 302 No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material has not been established.

TSCA Inventory Listing All components of this product are listed on the TSCA inventory list.

SARA 313 Chemical 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 This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: OTHER INFORMATION

Important Note: *To be the best of our knowledge, the information contained herein is accurate. However there is no assumption of 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. Since the conditions of handling, storage and disposal of this product are beyond the control of the manufacturer/supplier, the manufacturer/supplier will not be responsible for loss, injury, or expense arising out of the products improper use. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.*

End of SDS

