

tyco/Adhesives**MATERIAL SAFETY DATA SHEET****SECTION I**

PRODUCT NAME: **Nashua 357SA Spray Adhesive**

CHEMICAL FAMILY: Rubber-based adhesive; Alkane propellant

DOT ID NO.: UN1950. Aerosol, Flammable in DOT 2P cans.

HAZARD CLASS: Class 2.1
HMIS (NPCA) Rating 240C
WHMIS (Canada) Class B, Division 1

EMERGENCY TELEPHONE NUMBER: CHEMTREC 1-800-424-9300

OTHER TECHNICAL/HEALTH/SAFETY INFORMATION: 617-861-3286

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

	CAS REG. NO.	AMOUNT	EXPOSURE LIMIT
n-HEXANE	110-54-3	20-40%	50 ppm*
ACETONE	67-64-1	10-20%	750 ppm* 1000 ppm**
PROPANE/ISOBUTANE BLEND	74-98-6 75-28-5	20-40%	1000 ppm***

* OSHA 29CFR 1900.1000, 8-hour Time Weighted Average (TWA)
** OSHA short term (15 min.) exposure limit (STEL)
*** OSHA PEL for Propane; None assigned for Isobutane

SECTION III - PHYSICAL/CHEMICAL INFORMATION

BOILING POINT: -43.7°F VAPOR DENSITY (Air=1): 1.56*

pH: Neutral VAPOR PRESSURE: 58-62 psig (20°C)

SPECIFIC GRAVITY: 0.70-0.75 WATER SOLUBILITY: Negligible

MELTING POINT: -372°F VAPORATION RATE (BuAc=1): Very fast

VISCOSITY: Not applicable

APPEARANCE AND ODOR: Adhesive is clear, sticky mass with odor of acetone. Adhesive has no odor once solvent has evaporated.

* Propane (most volatile component).

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SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT: -156°F (TCC) for propellant

AUTOIGNITION TEMPERATURE: Not available

LEL: 1.0 Percent

UEL: 25 Percent

EXTINGUISHING MEDIA: CO₂, foam, dry chemical, water.

SPECIAL FIRE FIGHTING PROCEDURES: Cool unignited containers with water. Firefighters should be equipped with self-contained breathing apparatus and protective clothing, and be aware that pressurized containers may explode on overheating, creating potential for detonation if ruptured in vicinity of fire or spark ignition source.

UNUSUAL FIRE & EXPLOSION HAZARDS: Extremely flammable. If overheated, pressurized containers could explode from pressure buildup. If cans rupture, extinguish all ignition sources in vicinity and ventilate spill area to dissipate unignited vapors.

SECTION V - REACTIVITY DATA

STABILITY: Stable under ordinary conditions. Pressurized containers may rupture at elevated temperatures.

INCOMPATIBILITY: Chemically compatible with most materials. Do not store at temperatures above 120°F in order to avoid container rupture. Do not puncture or incinerate pressurized containers.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO₂, smoke and other toxic volatile products when pyrolyzed or burned.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

ACGIH TLV:	Acetone:	750 ppm TWA, 1000 ppm STEL
	n-Hexane:	50 ppm TWA
	Propane:	Simple asphyxiant
	Isobutane:	Non-assigned

COMPONENTS LISTED AS KNOWN OR POTENTIAL CARCINOGENS: None.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Cardiac abnormalities may be aggravated by inhalation.

ACUTE EFFECTS OF OVEREXPOSURE:

- INHALATION: Vapors will cause dizziness, headache, nausea. Severe exposure may cause unconsciousness or even death.
- SKIN CONTACT: Vapors not harmful by this route of entry. Liquid adhesive will result in rash and irritation, defatting of tissue, and possible development of dermatitis.
- EYE CONTACT: Vapors not harmful by this route of entry. Liquid adhesive will cause irritation.
- INGESTION: Ingestion is unlikely.

CHRONIC EFFECTS OF OVEREXPOSURE: Possibility of nervous system damage if product is abused.

EMERGENCY & FIRST AID PROCEDURES:

- INHALATION: Remove victim to fresh air, administer oxygen or CPR if necessary.
- SKIN CONTACT: Wash thoroughly with soap and water.
- EYE CONTACT: Flush with large amount of fresh water for at least 15 minutes. Get medical attention.
- INGESTION: Do not induce vomiting! Get immediate medical attention.

TOXICITY INFORMATION:

Acetone:	ihl-rat LCLo	16000 ppp/4H
	orl-mus LD50	3000 mg/kg
n-Hexane:	ihl-hum TCLo	5000 ppm/10M
	orl-rat LD50	28710 mg/kg
Propane:	None available - Simple asphyxiant (OSHA)	
Isobutane:	None available	

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

LARGE SPILLS: Isolate the area and keep unnecessary personnel away. Extinguish all electrical or flame ignition sources and ventilate area to disperse vapors. Wear NIOSH-approved protective clothing and self-contained breathing apparatus. Confine liquid and soak up with inert absorbent such as clay or sand, place in leak-free containers, label, and retain for RCRA and State approved disposal. Do not allow material to enter sewers or water courses leading to surface waters.

SMALL SPILLS: Soak up liquid in inert absorbent material and dispose as above. Avoid electrical and flame ignition sources.

WASTE DISPOSAL: Do not puncture pressurized containers! Do not place in incinerators! If container contents have completely dispensed and no propellant pressure remains, empty container can be removed with ordinary trash. Otherwise, dispose in accordance with RCRA and local regulations.

EPA HAZARDOUS WASTE NUMBER: D001

PRECAUTIONS FOR HANDLING AND STORING: Do not store above 120°F, so as to avoid undue pressure buildup in containers. While dispensing liquid from container, avoid directing spray toward eyes or exposed skin surfaces, and do not use in confined spaces containing electrical or flame ignition sources.

SECTION VIII - CONTROL MEASURES

VENTILLATION REQUIREMENT: Local or mechanical explosion proof.

RESPIRATORY PROTECTION: If exposure exceeds, or may exceed, OSHA or ACGIH recommended exposure limits, NIOSH-approved respirators must be used. At extreme exposure levels, use self-contained breathing apparatus.

PROTECTIVE GLOVES: Organic solvent impervious.

EYE PROTECTION: Goggles, full face shield if necessary.

OTHER PROTECTIVE EQUIPMENT: Solvent-impervious clothing to prevent skin contact.

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The information presented herein was prepared at tyco/**Adhesives** (R&D Laboratory, 17 Hartwell Avenue, Lexington, MA 02421 by qualified technical personnel, and to our knowledge it is true and accurate. The information and recommendations are furnished for this product with the understanding that the purchaser will independently determine the suitability of the product for his purposes. The data do not constitute a warranty, expressed or implied, statutory or otherwise, nor are they a representation for which tyco/**Adhesives** assumes legal responsibility. The data are submitted for the user's information and consideration only. Any use of this product must be determined by the user to be in accordance with the applicable federal, state and local laws and regulations.

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