SAFETY DATA SHEET

SECTION 1: COMPANY AND PRODUCT IDENTIFICATION

Company: HAR Adhesive Technologies

60 South Park

Bedford, OH 44146

Emergency Contact Number: 800-424-9300 (CHEMTREC)

Information Telephone Number: 440-786-7185

Product Name 228, 628, 628B

Recommended Use: Adhesive

SECTION 2: HAZARDS IDENTIFICATION

OSHA Regulatory Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazard Classification: Flammable Liquid, Category 2 Skin Irritation, Category 3

GHS Signal Word: DANGER! Highly flammable liquid and vapors. Irritant by inhalation, ingestion, skin contact, and eye contact.





Hazard Statements: Highly flammable liquid and vapor

Causes skin irritation Causes eye irritation

May cause respiratory irritation May cause drowsiness or dizziness

May be fatal if swallowed or enters airways

Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces – no smoking.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Avoid release to the environment.

Use personal protective equipment as required.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do.

Continue rinsing.

Potential Health Effects

Principal Routes of Exposure Inhalation, skin absorption, eye contact

Acute Effects

Eyes: Contact with eyes may cause irritation. Direct contact with liquid or vapors may cause stinging, tearing, redness,

swelling, and eye damage.

Skin: May cause skin irritation and /or dermatitis. Prolonged or repeated contact or exposure to vapors may cause

redness, burning, and drying and cracking of the skin.

Inhalation: Breathing high concentrations of vapors may cause irritation of the nose and throat or signs of nervous system

depression (i.e. – headache, nausea, drowsiness, dizziness, vomiting, loss of coordination and fatigue).

Ingestion: Ingestion may cause irritation of the digestive tract, nausea, vomiting, and signs of nervous system depression.

Chronic Effects Avoid repeated exposure. May cause blood damage. Repeated contact may cause allergic reactions in very

susceptible persons.

Aggravated Medical Conditions Pre-existing eye, skin, or respiratory disorders may be aggravated by exposure to this product.

SECTION 3: COMPOSITION INFORMATION

Chemical Designation	CAS No.	% by Weight
Hexane	110-54-3	22 - 40%
Methyl Ethyl Ketone	78-93-3	22 - 40%
Toluene	108-88-3	22 - 40%

SECTION 4: FIRST AID MEASURES

General Advice Show this safety data sheet to the doctor in attendance

Eyes: Flush with plenty of cool water for at least 15 minutes, holding eyelids apart for thorough irrigation. If irritation persists, get

immediate medical attention.

Skin: Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash affected areas thoroughly with mild

soap. If skin irritation persists, get immediate medical attention.

Inhalation: Move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen and get

immediate medical attention.

Ingestion: Do not induce vomiting – seek immediate medical attention. If vomiting occurs, keep head lower than hips to prevent aspiration.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media: Carbon dioxide, dry chemicals, foam. Water may be helpful in keeping adjacent containers cool; avoid spreading the liquid with

water used for cooling. Water-based sprinkler systems may help contain larger fires.

Specific Hazards arising

from the Chemical

Closed containers may rupture if exposed to fire or extreme heat. May produce toxic fumes if burning.

Special protective

Equipment:

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment. Remove all sources of ignition.

Environmental Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product

Precautions from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant

spillages cannot be contained.

Methods for Clean-up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface

thoroughly.

Other Information None known

SECTION 7: HANDLING & STORAGE

Handling: Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Wear appropriate personal

protective equipment. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharges.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from extremes of heat or cold. Keep in properly

all metal parts of the equipment must be grounded. Keep away from open flames, hot surfaces and sources of ignition.

labeled containers.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

NFPA is a Health, Flammability and Reactivity rating: 230B

4 - SEVERE HAZARD, 3 - SERIOUS HAZARD, 2 - MODERATE HAZARD, 1 - SLIGHT HAZARD, 0 - MINIMAL HAZARD, * - Chronic Hazard

Exposure Limits

Storage:

Hazardous Components	OSHA PEL	ACGIH TLV
Hexane	500	50
Methyl Ethyl Ketone	300	300
Toluene	200	50

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eyes/Face: Safety goggles or glasses, or full face shield

Skin: Protective gloves and impervious clothing.

Respiratory Protection: In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically

qualified person for the specific work conditions.

Hygiene Practices: Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after

handling. When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow liquid.
Odor: Solvent odor.

Odor Threshold Not available

VOC (g/L) 670 VOC (g/L) less exempt & water 670 Non-volatile (wt. %) 18.75 Specific Gravity (g/l) 0.827 Bulk Density (lb./gal): 6.89 Solubility in Water Insoluble рΗ Not available Viscosity Not available Evaporation rate: Faster than nBuAc Vapor Pressure (mmHg): Not available Vapor Density: Heavier than air **Boiling Point:** 154°F [68°C]

Freezing/Melting Point: Not Determined

Flammability (solids):

Partition Coefficient (n-octonal/water)

No data

Auto-ignition Temp:

No data

Decomposition Temp:

No data

Explosive Properties:

No data

Oxidizing Properties:

No data

Flash Point:

-20°F [-29°C]

Flammable Limits: Lower: 1.37; Upper: 8.2

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions. Hazardous polymerization does not occur.

Conditions to Avoid: Keep away from open flames, hot surfaces, static electricity and sources of ignition. Avoid extremes of heat or cold.

Materials to Avoid: Incompatible with strong acids and bases, alkali metals, halogens, and strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide, carbon dioxide, smoke, a

other unidentified organic compounds may be formed during combustion.

Possibility of Hazardous Reactions: None under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

No data Reproductive Toxicity: No data Acute Toxicity: Mutagenicity: No data Irritation: No data STOT-single exposure: No data Corrosivity: No data STOT-repeated exposure: No data Sensitization: No data

Aspiration Hazard: No data Typical Routes of Entry: Inhalation, skin absorption, eye contact

Chronic Toxicity / Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:

Component IARC NTP OSHA

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: Acute and prolonged Toxicity to Fish: No data

Acute Toxicity to Aquatic Invertebrates: No data Environmental Fate and Pathways: No data

Persistence and Degradability: No data
Bioaccumulative Potential: No data
Mobility in Soil: No data
Other Adverse Effects: No data

SECTION 13: DISPOSAL CONSIDERATION

Waste Disposal Method

Dispose of in accordance with all applicable local, state, and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

SECTION 14: TRANSPORT INFORMATION

REGULATION DESCRIPTION

DOT

Proper Shipping Name ADHESIVES

Hazard Class 3
UN-No UN1133
Packing Group II

ICAO / IATA Contact the preparer for further information. IMDG/IMO Contact the preparer for further information.

SECTION 15: REGULATORY INFORMATION

US TSCA: Yes – All components are listed or exempt

Federal Regulations

SARA 313

Section 313 OF Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). If listed below, this product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Designation Cas No. Weight %

Hexane	110-54-3	22 - 40%
Toluene	100-00-3	22 - 40%

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPS) (see 40 CFR 61)

Chemical Designation	Cas No.	Weight %
Hexane	110-54-3	22 - 40%
Toluene	108-88-3	22 - 40%

State Regulations

California Proposition 65

This product contains the following substance(s) known to the state of California to cause cancer or reproductive harm:

Chemical Name	CAS Number
Toluene	108-88-3

SECTION 16: OTHER INFORMATION

Date issued: 12/14/2017 VER 1

The above Information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith. No warranty is implied with respect to the quality or the specification of the product and the user must satisfy his self that the product is entirely suitable for his purposes.

***** END OF SAFETY DATA SHEET *****