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Material Safety Data Sheet Endurabond HSS

1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Trade Names:	Endurabond HSS	Emergency Phone Number:	800-424 9300
Description:	Cyclohexanone Solution	International Number:	202-483-7616
Company Identification:	Blair Rubber Company 5020 Panther Parkway Seville, OH 44273	Information Number:	330-769-5583

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Hazardous Components	CAS No.	Approximate %
Toluene	108-88-3	70
Cyclohexanone	108-94-1	30

3. HAZARDS IDENTIFICATION

HMIS HEALTH: 2 FLAMMABILITY: 3 REACTIVITY: 0 PERSONAL PROTECTION: H

PRIMARY ROUTES OF EXPOSURE: Eye, Skin, Inhalation (breathing), Ingestion (swallowing)

EYE CONTACT: May cause slight to mild irritation. May cause corneal opacity (clouding of the eye surface). Can cause burning sensation, tearing, and redness.

SKIN CONTACT: May cause slight to mild irritation. Prolonged or repeated contact may dry the skin and lead to irritation (i.e. dermatitis). Can cause redness, itching, and burning sensation.

INHALATION (Breathing): Irritation to the eyes, nose and respiratory tract. Can cause dizziness, headaches, and incoordination. Nausea, vomiting, and stomach upset can occur. Can cause wheezing, coughing, shortness of breath, and tightness in the chest. Can cause anesthetic and/or narcotic effects.

INGESTION (Swallowing): Irritating to the mouth, throat, and stomach. May cause nausea, vomiting, pain and stomach upset (e.g. diarrhea). Can cause dizziness, faintness, headache, and loss of coordination.

TARGET ORGANS/CHRONIC EFFECTS: Liver, kidneys. Nervous system. Lungs and respiratory system. Skin. Eyes.

EMERGENCY OVERVIEW

FLAMMABLE LIQUID AND VAPOR. INHALATION MAY CAUSE DIZZINESS, HEADACHE AND LOSS OF COORDINATION. INGESTION CAN CAUSE DIZZINESS, FAINTNESS, HEADACHE AND LOSS OF COORDINATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE DIGESTIVE TRACT IRRITATION. INGESTION MAY CAUSE NAUSEA, VOMITING, PAIN, UPSET STOMACH, DIARRHEA.

4. FIRST AID MEASURES

EYE CONTACT: Flush eyes with water for at least 15 minutes. If irritation develops, consult a physician.

SKIN CONTACT: Remove contaminated clothing and shoes. Wash affected area with soap and water. If irritation develops, consult a physician. Wash contaminated clothing separately before reuse.

INHALATION (Breathing): Remove to fresh air. If symptoms develop, seek immediate medical attention. If not breathing, give artificial respiration.

INGESTION (Swallowing): Seek medical attention. Do not induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIANS: Treatment should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

5. FIRE - FIGHTING MEASURES

Flash Point: 45°F/7°C **Method.....**: Setaflash Closed Cup **Autoignition.....**: Not determined

Explosive Limits: LEL 1.1% UEL 9.4% **OSHA Flammable Liquid:** Class IB

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: Smoke, soot, and toxic/irritating fumes (i.e. carbon dioxide, carbon monoxide, etc.). Formaldehyde and/or other aldehydes.

FIRE AND EXPLOSION HAZARDS: High temperatures can cause sealed containers to rupture due to a build up of internal pressure. Cool with water. Vapors can travel to a source of ignition (flame, electric motor, hot surface, cigarette, etc.) and flash back. During a fire, irritating and highly toxic gases may be generated during combustion or decomposition.

EXTINGUISHING MEDIA: SMALL FIRES: Dry chemical, carbon dioxide, halon, water spray, or foam.

LARGE FIRES: Water spray or fog.

FIRE FIGHTING PROCEDURES/EQUIPMENT: Fire fighters and others who may be exposed to the products of combustion should be equipped with NIOSH-approved positive pressure self-contained breathing apparatus (SCBA) and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

EVACUATION: Isolate hazard areas. Keep unnecessary and unprotected personnel from entering. Eliminate all sources of ignition (flame, hot surfaces and electrical, static or frictional sparks). Avoid breathing vapor or spray mists. Do not handle until all safety precautions on this MSDS have been read and understood.

CONTAINMENT: Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewers or bodies of water.

CLEAN-UP/PERSONAL PROTECTION EQUIPMENT: Appropriate safety measures and protective equipment should be used. Use supplied air respirator or self-contained breathing apparatus in enclosed spaces or if airborne exposure limits can be exceeded. See Section 8.

COLLECTION AND DISPOSAL: Stop discharge, if safe to do so. Use proper protective equipment. Use non-sparking tools and/or explosion-proof equipment. Stop ignition sources. Cover spills with absorbent clay or sawdust and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.

REPORTING: Spills of this material in excess of a component's RQ must be reported to the National Response Center (1-800-424-8802) and to the appropriate state and local emergency response organizations.

Toluene	RQ= 1000 lb
Cyclohexanone	RQ=5000 lb

7. HANDLING AND STORAGE

STORAGE CONDITIONS: Store in cool, dry, well ventilated area away from heat, ignition sources, and direct sunlight. Keep containers tightly closed. **WARNING:** Hot organic chemical vapors or mists can suddenly and without warning combust when mixed with air. Ignition can occur at typical elevated temperature process conditions. Any use in such process should be evaluated thoroughly to assure safe operating conditions. **WARNING: Application of this product within a tank or other confined space must comply with the requirements of OSHA Permit - Required Confined Spaces Standard.**

TRANSFERS: Containers should be supported and grounded before opening, dispensing, mixing, pouring, and emptying. Open with non-sparking tools. If container is warm, open bung slowly to release internal pressure.

PERSONAL HYGIENE: Wash thoroughly after handling, especially before eating, drinking, smoking, and using restroom facilities. Wash contaminated goggles, face shield, and gloves. Professionally launder contaminated clothing before reuse.

EMPTY CONTAINER PRECAUTIONS: Attention! This container hazardous when empty. Follow label warnings even after container is emptied, since empty containers may retain produce residues. Do not use heat, sparks, open flames, torches, and cigarettes on or near empty container. Do not reuse container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

	ACGIH	OSHA-PEL
Toluene	TLV: 20 ppm (TWA) 50 ppm (STEL)	50 ppm
Cyclohexanone	TLV: 25ppm (TWA) N.E. (STEL)	N.E.

ENGINEERING CONTROLS/VENTILATION: Local exhaust ventilation is recommended when vapors, mists, or dusts can be released in excess of established airborne exposure limits (TLVs or PELs). Caution: Solvent vapors are heavier than air and collect in lower levels of the work area. Sufficient ventilation (using explosion-proof equipment) should be provided to prevent flammable vapor/air mixtures from accumulating.

EYE PROTECTION: Wear chemical splash goggles. An eye wash facility should be readily available.

SKIN PROTECTION: Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, consult glove manufacturer to determine the proper type for a specific operation.

RESPIRATORY PROTECTION: Avoid breathing vapor and/or mists. Wear NIOSH/MSHA-approved equipment. Determine the appropriate type by consulting the respirator manufacturer. High airborne concentrations (>1000 ppm) necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134. Organic vapor/acid gas respirator for <1000 ppm.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance.....: Clear liquid	Odor.....: Solvent	Physical State.....: Liquid
Solubility.....: 15% in water	pH.....: Not Applicable	VOC Material.....: 7.84 lb/gal
Specific Gravity...: 0.94	% Non-Vol (w/w)....: -0-	

Note: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal conditions of use.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: High temperatures

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers, reducers, acids, strong bases.

11. TOXICOLOGY INFORMATION

COMPONENTS:

Cyclohexanone: Oral LD50	Rat	1,535 mg/kg
	Mouse	1,400 mg/kg
	Rabbit	948 mg/kg

Cyclohexanone is a confirmed animal carcinogen with unknown relevance to humans

Toluene: Adverse effects to kidneys and liver will be increased by the presence of ethanol. Chronic exposure has been shown to cause auditory impairment in laboratory animals. This chemical has been shown to cause fetal injury when tested in laboratory animals.

Oral LD50	Rat	5,000 mg/kg
	Rat	5,580 mg/kg
Dermal LD50	Rabbit	12,124 mg/kg
Inhalation LC50	Mouse	5,320 mg/kg
	Rat - Female	5,060 mg/kg

12. ECOLOGICAL INFORMATION

Breakdown via chemical, photochemical and microbial degradation in natural environment. Generally not degraded by hydrolysis, 300ppm of Cyclohexanone is safe for aquatic life. Other components are unknown.

13. DISPOSAL CONSIDERATIONS

DISPOSAL: When a decision is made to discard this material as supplied, it meets RCRA's characteristic definition of ignitability. The toxicity characteristic (TC) has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

GENERAL STATEMENTS: Federal regulations may apply to empty container. State and/or local regulations may be different.

GENERAL RECOMMENDATIONS: Of the methods of disposal currently available it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) recycle or rework, if feasible; (2) incinerate at an authorized facility; or (3) treat at an acceptable waste treatment facility.

SPECIAL INSTRUCTIONS: Be sure to contact the appropriate government environmental agencies if further guidance is required.

14. TRANSPORT INFORMATION

Weight (lb) Shipping Name: Adhesive

DOT Label.....: Flammable Liquid

UN/NA ID Num...: UN 1294

DOT Label No.: L279-1

Emergency Response Guide Number: 26

Hazard Class...: 3 IATA/49 CFR/3.2 IMO

WHMIS Label....: No information available.

Packing Group: II Consult transportation regulations for current DOT regulatory information.

15. REGULATORY INFORMATION

FEDERAL: This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III - Section 311/312 - Hazard Categories:

- Y - Fire Hazard
- N - Sudden Release of Pressure Hazard
- N - Reactivity Hazard
- Y - Immediate (acute) Health Hazard
- Y - Delayed (Chronic) Health Hazard

Ozone-Depleting chemicals - No regulated ingredients

SARA Section 302 Extremely Hazardous Materials. None.

SARA Section 313 Toxic Chemicals. None.

TSCA Section 12 (b) Export Notification. None.

TSCA Section 8 (d) Data Reporting Rule. None.

CHEMICAL LISTING - Listed on the following Country's Chemical Inventories:

United States Toxic Substance Control Act

Chemical component in this product is on the section 8 (b) Chemical Substance Inventory List (40 CFR 710).

16. OTHER INFORMATION/ADDITIONAL COMMENTS

USERS RESPONSIBILITY: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions - in addition to those described herein- are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

DISCLAIMER OF LIABILITY: The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

The ingredients listed in Composition/Information on the Components Section are embedded in the product and are provided for information.

Blair Rubber Company provides the information herein is in compliance with Federal hazard communication standard, 29 CFR 1910.1200, to give warning of actual and assumed hazards, and to inform of generally applicable precautions and control measures which are known to Blair Rubber Company. Hazard information is based on available scientific evidence, but is not always obtained from sources under the direction or control of Blair Rubber Company. Blair Rubber Company makes no warranty or representation that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyer's own risk. Blair Rubber Company warrants only that it has made no effort to censor other than trade secret information or to conceal hazards of its products. The data shown on these pages in no way modifies, amends or enlarges any specification or warranty.