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|----------------|---------|-----------------------|-----------|
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## Material Safety Data Sheet

### Endurabond OSN-2

#### 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

|                         |                                                                   |                         |              |
|-------------------------|-------------------------------------------------------------------|-------------------------|--------------|
| Trade Names:            | OSN-2                                                             | Emergency Phone Number: | 800-424-9300 |
| Description:            | Polymer Solvent Solution                                          | International Number:   | 202-483-7616 |
| Company Identification: | Blair Rubber Company<br>5020 Panther Parkway<br>Seville, OH 44270 | Information Number:     | 330-769-5583 |

#### 2. COMPOSITION/INFORMATION ON THE COMPONENTS

| Hazardous Components                | CAS No.       | Approximate % |
|-------------------------------------|---------------|---------------|
| Chlorinated Polymer                 | Not Hazardous | 12-14         |
| Carbon black                        | 1333-86-4     | 1- 3          |
| Epichlorohydrin                     | 106-89-8      | < 0.3         |
| Hexamethylenetetramine              | 100-97-0      | 1-5           |
| Selenium                            | 7782-49-2     | 2-4           |
| Toluene                             | 108-88-3      | 30-40         |
| Methylethyl Ketone                  | 78-93-3       | 15-25         |
| Solvent Naphtha, Petroleum, Lt. Ar. | 64742-95-6    | 6-10          |
| Resorcinol                          | 108-46-3      | 3-5           |
| 1,2,4- Trimethylbenzene             | 95-63-6       | 7-9           |
| Mesitylene                          | 108-67-8      | 1-3           |
| Hydrotreated heavy naphtha          | 64742-48-9    | 1-3           |

#### 3. HAZARDS IDENTIFICATION

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

\* - Indicates a chronic hazard. See Section 3.

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

**EYE CONTACT:** May cause slight to mild irritation.

**SKIN CONTACT:** May cause slight to mild irritation. May be absorbed through the skin in harmful amounts. May cause dermatitis.

**INHALATION (Breathing):** Possible irritation of the respiratory system can occur causing a variety of symptoms such as dryness of the throat, tightness of the chest, and shortness of breath. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma.

**INGESTION (Swallowing):** Harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

**TARGET ORGANS/CHRONIC EFFECTS:** Liver, kidneys. Nervous system. Lungs and respiratory system. Skin. IARC has designated carbon black as Group 2B – inadequate evidence for carcinogenicity in humans, but sufficient evidence in animals. Both IARC and NTP have listed epichlorohydrin as a cancer causing agent.

## EMERGENCY OVERVIEW

**BLACK LIQUID, WITH SOLVENT ODOR. FLAMMABLE LIQUID AND VAPOR. INHALATION MAY CAUSE DIZZINESS, HEADACHE AND INCOORDINATION. HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE SKIN AND EYE IRRITATION. VAPOR HARMFUL; MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA.**

See sections 3, 5 & 6.

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## 4. FIRST AID MEASURES

**EYE CONTACT:** Flush eyes with water for at least 15 minutes. Get prompt medical attention.

**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. Restore and support continued breathing.

**INGESTION (Swallowing):** Seek medical attention. Do not induce vomiting. Give victim one or two glasses of water or milk. Call physician or poison control center immediately for further instructions. Never give anything by mouth to an unconscious person..

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## 5. FIRE - FIGHTING MEASURES

**Flash Point .....** 25F, -4C

**Explosive Limits:** LEL 1.8% UEL 10%

**Autoignition.....:** Not Determined

**OSHA Flammable Liquid:** Class IIIB

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Smoke, soot, and toxic/irritating fumes (i.e., carbon dioxide, carbon monoxide, etc.). Hydrogen chloride. Phosgene. Chlorine.

**FIRE AND EXPLOSION HAZARDS:** Flammable liquid and vapor. Keep containers closed tightly. High temperatures can cause sealed containers to rupture due to a buildup 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, fog, or alcohol foam. Water spray may be ineffective; use to keep containers cool.

**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.

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## 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.

|                    |            |
|--------------------|------------|
| Epichlorohydrin    | RQ=100 LB  |
| Methylethyl Ketone | RQ=5000 LB |
| Resorcinol         | RQ=5000 LB |
| Selenium           | RQ= 100 LB |

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## 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. Refer to OSHA 29 CFR Part 1910.106 "Flammable and Combustible Liquids" for specific requirements. **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 re-use.

**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, cigarettes on or near empty container. Do not reuse container.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

|                                     | ACGIH-TWA | STEL | OSHA-TWA  | Ceil | Units |      |
|-------------------------------------|-----------|------|-----------|------|-------|------|
| Carbon Black                        | 3.5(dust) | None | 3.5(dust) | N.E. | ppm   | SKIN |
| Epichlorohydrin                     | 0.5       | None | 2.0       | N.E. | ppm   |      |
| Hexamethylenetetramine              | N.E.      |      | N.E.      |      |       |      |
| Dibasic Lead Phosphite              | 0.05      | N.E. | N.E.      | N.E. | ppm   | SKIN |
| Selenium                            | 0.2       | N.E. | 0.2       | N.E. | ppm   |      |
| Toluene                             | 50        | N.E. | 150       | N.E. | ppm   |      |
| Methylethyl Ketone                  | 200       | 300  | 200       | 300  | ppm   |      |
| Solvent Naphtha, petroleum, lt. ar. | N.E.      | N.E. | N.E.      | N.E. |       |      |
| Resorcinol                          | 10        | 20   | 10        | N.E. | ppm   |      |
| 1,2,4 - trimethylbenzene            | N.E.      | N.E. | N.E.      | N.E. |       |      |
| Mesitylene                          | N.E.      | N.E. | N.E.      | N.E. |       |      |
| Hydrotreated Heavy Naphtha          | N.E.      | N.E. | N.E.      | N.E. |       |      |

N.E. - Not Established

**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 may 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.

**HYGIENIC PRACTICES:** Wash hands before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                     |                                        |                                             |
|-------------------------------------|----------------------------------------|---------------------------------------------|
| <b>Appearance.....:</b>             | <b>Black Odor.....: Solvent</b>        | <b>Physical State.....: Liquid</b>          |
| <b>Solubility.....: Insoluble</b>   | <b>pH.....: Not Applicable</b>         | <b>VOC Material.....: 6.07 lbs./gal.</b>    |
| <b>Specific Gravity...: 0.97 %</b>  | <b>Non-Vol (w/w)....: 25</b>           | <b>Vapor Density.....: Heavier than air</b> |
| <b>Solubility in H2O: Insoluble</b> | <b>Boiling Range .....: 171-181° F</b> | <b>Density.....: 8.09 lbs./gal.</b>         |

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

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## 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under normal conditions of use.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** High temperatures. Sources of ignition. Aluminum or galvanized parts in a closed system.

**INCOMPATIBILITY WITH OTHER MATERIALS:** Oxidizers, acids, strong bases, water.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon dioxide, carbon monoxide, chlorine, hydrogen chloride. Phosgene.

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## 11. TOXICOLOGY INFORMATION

No data available on this product.

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## 12. ECOLOGICAL INFORMATION

No data are available on this product.

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## 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). Disposal should be done in accordance with Federal (40 CFR Part 261), State and Local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

**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.

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## 14. TRANSPORT INFORMATION

Weight (lb) Shipping Name: Adhesives

49 CFR IATA IMO

Y Y Y

DOT Label.....: KEEP Aflammable Liquid

UN/NA ID Num...: UN 1133

Emergency Response Guide - Number 26

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

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

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## 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:

Toluene, Methyl ethyl Ketone, Epichlorohydrin, 1,2,4 - Trimethylbenzene, Selenium, Lead Compounds

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

**United States** Toxic Substance Control Act

Chemical component (s) in this product are on the TSCA Section 8.

### STATE RIGHT-TO-KNOW:

#### California

Toluene(108-88-3) - Birth Defects, Reproductive Harm

Epichlorohydrin(106-89-8) - Carcinogenic, Birth Defects, Reproductive Harm

Benzene, trace levels (71-43-2) - Carcinogenic, Birth Defects, Reproductive Harm

**CONEG** - No data available. **CEPA** - **NPRI** No data available.

**WHMIS:** This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System.

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## 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 specifications or warranties..**