

SAFETY DATA SHEET

| Product identifier used on the label: | |
|---|--|
| Product Name: | Westco HRA 70 |
| Other means of identification: | |
| Product Description: | C9 Aromatic Hydrocarbon Resin; |
| Synonyms: | None |
| Recommended use of the chemical | and restrictions on use: |
| | .HRA resins can be used in rubber compounds as a plasticizer, |
| Product Use/Restriction: | softener, tackifier and/or processing aid. In heavily loaded stocks they act as a dispersion aid. |
| Chemical distributor, or other respon | softener, tackifier and/or processing aid. In heavily loaded stocks they act as a dispersion aid. sible party Name, address, and telephone number: |
| Chemical distributor, or other respon Distributor Name: | softener, tackifier and/or processing aid. In heavily loaded stocks they act as a dispersion aid. <u>sible party Name, address, and telephone number:</u> Western Reserve Chemical Corporation |
| | softener, tackifier and/or processing aid. In heavily loaded stocks they act as a dispersion aid. sible party Name, address, and telephone number: |
| Chemical distributor, or other respon Distributor Name: Address: | softener, tackifier and/or processing aid. In heavily loaded stocks they act as a dispersion aid. <u>sible party Name, address, and telephone number:</u> Western Reserve Chemical Corporation 4837 Darrow Road Stow, OH 44224 |
| Chemical distributor, or other respon Distributor Name : | softener, tackifier and/or processing aid. In heavily loaded stocks they act as a dispersion aid. <u>sible party Name, address, and telephone number:</u> Western Reserve Chemical Corporation 4837 Darrow Road Stow, OH 44224 USA |
| <u>Chemical distributor, or other respon</u> Distributor Name: Address: General Phone Number: | softener, tackifier and/or processing aid. In heavily loaded stocks they act as a dispersion aid. <u>sible party Name, address, and telephone number:</u> Western Reserve Chemical Corporation 4837 Darrow Road Stow, OH 44224 USA 330 650 2244 |
| <u>Chemical distributor, or other respon</u> Distributor Name: Address: General Phone Number: General Fax Number: | softener, tackifier and/or processing aid. In heavily loaded stocks they act as a dispersion aid. <u>sible party Name, address, and telephone number:</u> Western Reserve Chemical Corporation 4837 Darrow Road Stow, OH 44224 USA 330 650 2244 |

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

| GHS Pictograms: | |
|---------------------------|---|
| Signal Word: | Warning |
| GHS Class: | Classification of the substance or mixture Classification (GHS-US) Combustible Dust Carcinogenicity Category 2 |
| Hazard Statements: | *May form combustible dust concentrations in air. * Suspected of causing cancer. |
| Precautionary Statements: | * Obtain special instructions before use. * Do not handle until all safety precautions have been read and understood. * Wear protective gloves/protective clothing/eye protection/face protection. * IF exposed or concerned: Get medical advice/attention. * Store locked up. * Dispose of contents/container in accordance with Local, State, Federal and International regulations. |

Hazards not otherwise classified that have been identified during the classification process:

Aromatic Hydrocarbon Resin

| Route of Exposure: | Eyes. Skin. Inhalation. Ingestion. |
|----------------------------------|---|
| Eye: | Dusts from this product may cause eye irritation. |
| Skin: | Repeated or prolonged contact may cause slight irritation to the skin. |
| Inhalation: | Dusts from this product may cause respiratory irritation. Vapors formed when material is processed at high temperatures may be irritating to the upper respiratory tract. |
| Carcinogenicity: | Suspected of causing cancer. |
| Potential Environmental Effects: | Harmful to aquatic life with long lasting effects. |
| Signs/Symptoms: | Potential Adverse human health effects and symptoms : Dust or particulates may cause mild respiratory tract and eye irritation. Product may cause mild skin irritation. |
| Notes : | Contact with skin or eyes with hot material may cause serious thermal burns to skin or eyes. |

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Mixtures:</u> Chemical Name | CAS# | Ingredient Percent | EC Num. |
|-----------------------------------|------------|--------------------|---------|
| Aromatic Hydrocarbon Resin | 68410-16-2 | ≥ 99 % | |
| Naphthalene | 91-20-3 | < 1 % | |

SECTION 4 : FIRST AID MEASURES

| Description of necessary measures | <u></u> |
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| Eye Contact: | First-aid measures after eye contact : Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking, tears or redness persist. |
| Skin Contact: | First-aid measures after skin contact : Wash with plenty of soap and water. If irritation persists, consult a doctor. Heated Material: For serious burns from heated material, get medical attention. In case of skin contact, immediately immerse in or flush with clean, cold water. Do not attempt to remove adhered material from skin. |
| Inhalation: | First-aid measures after inhalation:Remove to fresh air and keep at rest in a position comfortable for breathing. |
| Ingestion: | First-aid measures after ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. |
| Notes : | Most important symptoms and effects, both acute and delayed Symptoms/injuries : Chronic (long-term) health effects may result from repeated overexposure. |
| | Indication of any immediate medical attention and special treatment needed : Treat symptomatically. |

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

| Suitable Extinguishing Media: | Carbon dioxide. Foam. Dry chemical. Water spray or fog. |
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| Unusual Fire Hazards: | Fire hazard : May form combustible dust concentrations in air. Vapors generated from overheating/melting/decomposition may be flammable and may cause fire/explosion if source of ignition is present. |
| | Explosion hazard : Potential dust explosion hazard. When dust becomes airborne and is exposed to an ignition source, sufficient combustible/flammable dust may exist to burn in the open or explode if confined. |
| Special protective equipment and | precautions for fire-fighters: |
| Protective Equipment: | As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear. |

| Fire Fighting Instructions: | Use water spray or fog for cooling exposed containers. Avoid raising powdered materials into airborne dust, creating an explosion hazard. Apply aqueous extinguishing media carefully to prevent frothing/steam explosion. Exercise caution when fighting any chemical fire. Prevent firefighting water from entering environment. Fight fire from safe distance and protected location. |
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Hazardous decomposition products in case of fire : Carbon oxides (CO, CO2). Toxic fumes.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Notes :

| Personal precautions, protective equipment and emergency procedures: | | |
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| Personnel Precautions: | Emergency procedures for non-emergency personnel : Remove ignition sources. Ensure adequate ventilation. Evacuate unnecessary personnel. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". | |
| | Emergency procedures for emergency responders : No additional requirement. | |
| Environmental precautions: | | |
| Environmental Precautions: | Avoid release to the environment. | |
| Methods and materials for containment and cleaning up: | | |
| Methods for containment: | Sweep up or vacuum up the product. Avoid creating or spreading dust. Spilled material may present a slipping hazard. | |
| Methods for cleanup: | Dispose of solid materials or residues at a licensed site. | |
| Notes : | Reference to other sections : See section 8. Exposure controls and personal protection. | |

SECTION 7 : HANDLING and STORAGE

Precautions for safe handling:

| Handling: | Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with elevated temperature or molten product to prevent burns. Avoid raising powdered material due to explosion hazard. Prevent the build-up of electrostatic charge. Use only non-sparking tools. Handling this product may result in electrostatic accumulation. Use proper grounding procedures. The plastic packaging film used to secure bags of material on pallets can also develop static electricity remove packaging film in an area free from ignitable vapors/dust. Refer to the latest edition of the National Fire Protection Association (NFPA) 654 publication, Standard |
|--------------------------------------|---|
| | for the Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries, for complete discussion on dust explosion prevention and control measures. This material may be shipped as a viscous, molten product at elevated temperatures (approximately 177 °C), but below its flashpoint, to facilitate transfer to storage containers or processing vessels. |
| Hygiene Practices: | Do not eat, drink or smoke when using this product. Always wash hands after handling the product |
| Conditions for safe storage, includi | ng any incompatibilities: |
| Storage: | Technical measures : Electrical equipment should conform to the National Electric Code. The plastic packaging film used to secure bags of material on pallets can also develop static electricity remove packaging film in an area free from ignitable vapors/dust. Protect from freezing. If frozen, thaw and mix thoroughly before use. Storage conditions : Keep container tightly closed. Store in a dry place. Flaked forms may degrade by gradual oxidation. Maximum storage period : 12 months Storage temperature : < 40 °C |
| Specific end use(s): | |
| Work Practices: | Safety showers and eye wash stations should be available. |
| Notes : | Incompatible products : Oxidizing agents. |

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

| EXPOSURE GUIDELINES: | |
|-----------------------------------|--|
| Aromatic Hydrocarbon Resin : | |
| Guideline ACGIH: | ACGIH TWA (mg/m³): 10 mg/m³ (inhalable dust) 3 mg/m³ (respirable dust) USA ACGIH Remark (ACGIH) Particulates, not otherwise classified. |
| Guideline OSHA: | USA OSHA OSHA PEL (TWA) (mg/m³) 15 mg/m³ (total dust) 5 mg/m³ (respirable dust) USA OSHA Remark (US OSHA) Particulates, not otherwise classified |
| Naphthalene : | |
| Guideline ACGIH: | ACGIH TWA (ppm) 10 ppm ACGIH STEL (ppm) 15 ppm |
| Guideline OSHA: | OSHA PEL (TWA) (mg/m³) 50 mg/m³ OSHA PEL (TWA) (ppm) 10 ppm |
| Appropriate engineering controls: | |
| Engineering Controls: | Ensure good ventilation of the work station. Ventilation should provide 10 air changes per hour. |
| Individual protection measures: | |
| Eye/Face Protection: | Chemical splash goggles. Eyewash station in work area. |
| Skin Protection Description: | Wear suitable protective clothing such as coveralls. |
| Hand Protection Description: | Protective gloves. |
| Respiratory Protection: | Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear appropriate respiratory protection, if occupational exposure limits are exceeded or irritation/sensitivity is experienced. |
| PPE Pictograms: | 🗢 🛰 🛉 📀 |

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

| Physical State: | Solid Appearance : Pastilles. Flakes. |
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| Color: | Pale yellow. Translucent. Amber. |
| Odor: | Hydrocarbon. |
| Odor Threshold: | No data available |
| Boiling Point: | No data available |
| Melting Point: | No data available |
| Density: | Relative density : 1.06 1.08 |

| Solubility: | Water: Insoluble |
|----------------------------|---|
| Vapor Density: | Relative vapor density at 20 $^{\circ}\text{C}$: No data available |
| Vapor Pressure: | ~ 25 mm Hg |
| Evaporation Rate: | Relative evaporation rate (butyl acetate=1) : No data available |
| pH: | No data available |
| Flash Point: | > 480 °C |
| Flash Point Method: | (Closed Cup) |
| Auto Ignition Temperature: | No data available |
| Explosive Properties: | Explosive limits : No data available |
| 9.2. Other information: | |
| Notes : | Log Kow: No data available |
| | |

SECTION 10 : STABILITY and REACTIVITY

| No dangerous reactions known under normal conditions of use. Possibility of hazardous reactions : May form combustible dust concentrations in air. |
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| |
| Stable under use and storage conditions as recommended in section 7. |
| |
| Avoid the build-up of electrostatic charge. High temperature. Avoid dust formation. Direct sunlight. No flames, no sparks. Eliminate all sources of ignition. To avoid thermal decomposition, do not overheat. |
| |
| Oxidizing agents. |
| <u>.</u> |
| Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| |

SECTION 11 : TOXICOLOGICAL INFORMATION

| TOXICOLOGICAL INFORMATION: | |
|----------------------------|---|
| Naphthalene : | |
| Acute Toxicity: | ATE (oral) 500 |
| Acute Toxicity: | Not classified Based on available data, the classification criteria are not met |
| | |
| Naphthalene : | |
| IARC: | IARC group 2B - Possibly carcinogenic to humans |
| NTP: | National Toxicology Program (NTP) Status: Reasonably anticipated to be Human Carcinogen |
| Naphthalene : | |
| Skin: | LD50 dermal rabbit > 20 g/kg |
| Inhalation: | LC50 inhalation rat > 340 mg/m³ (Exposure time: 1 h) |
| Ingestion: | LD50 oral rat 490 mg/kg |
| Sensitization: | Respiratory or skin sensitization : Not classified Based on available data, the classification criteria are not met |
| Mutagenicity: | Germ cell mutagenicity : Not classified Lack of data |
| Reproductive Toxicity: | Not classified Lack of data |

SECTION 12 : ECOLOGICAL INFORMATION

Naphthalene :

| Naphthalene. | |
|-------------------------------------|---|
| Bioaccumulative potential: | |
| Bioaccumulation: | BCF fish 1 30 - 430 Log Pow 3.3 (at 20 °C) |
| Other adverse effects: | |
| Effect of Material On Aquatic Life: | LC50 fish 1: 5.74 - 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) EC50 Daphnia 1: 2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna) EC50 other aquatic organisms 1: 0.4 mg/l (Exposure time: 72 h - Species: Skeletonema costatum) LC50 fish 2: 1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) EC50 Daphnia 2: 1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through]) |
| Ecotoxicity: | |
| Ecotoxicity: | Ecology - general : Harmful to aquatic life with long lasting effects. |
| | |

| Persistence and degradability: | |
|----------------------------------|--|
| Biodegradation: | No additional information available |
| Mobility in soil: | |
| Mobility In Environmental Media: | Mobility in soil : No additional information available |
| | |

SECTION 13 : DISPOSAL CONSIDERATIONS

| Description of waste: | |
|-------------------------|---|
| Waste Disposal: | Waste treatment methods : Transfer to a safe disposal area in accordance with federal, state, and local regulations. |
| Contaminated Packaging: | Please ensure that packaging, including drums, are disposed of in a responsible manner and in accordance with federal, and your state's, solid/hazardous waste regulations. Due to more restrictive waste disposal regulations, NEVER wastetreat or dispose of material until you check your appropriate local, state, & federal regulations for requirements. |
| RCRA Number: | Product as purchased is not a RCRA hazardous Waste. |
| Notes : | USEPA guidelines for the classification determination are found in 40CFR 261.3. |

SECTION 14 : TRANSPORT INFORMATION

| DOT Shipping Name: | Non regulated. |
|----------------------|------------------|
| DOT Pictograms: | Not Regulated |
| IATA Shipping Name: | Non regulated. |
| IATA Pictograms: | Not Regulated |
| IMDG Shipping Name : | Non regulated. |
| ADR Shipping Name : | Non regulated. |
| RID Shipping Name : | Non regulated. |
| ICAO Shipping Name: | Non regulated. |

SECTION 15 : REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

| TSCA Inventory Status: | All components of this product are listed or exempt in TSCA inventory of Chemicals Substances. |
|------------------------|--|
| CERCLA Section 302: | If an accidental spill occurs, there is no reporting required. |
| State Regulations: | PA RTK, Ma RTK, NJ RTK: - Listed |
| Risk Phrases: | R45 - May cause cancer. R52 - Harmful to aquatic organisms. |
| Safety Phrase: | S36/39 - Wear suitable protective clothing and eye/face protection. S 3 - Keep in a cool, dry place. S29/35 - Do not empty into drains; dispose of this material and its container in a safe way. |





SECTION 16 : ADDITIONAL INFORMATION

| HMIS Ratings: | | | |
|---------------------------|--|--|-------|
| HMIS Health Hazard: | 1 | Health Hazard | 1 |
| HMIS Fire Hazard: | 1 | Fire Hazard | 1 |
| HMIS Reactivity: | 0 | Reactivity | 0 |
| HMIS Personal Protection: | J | Personal Protection | J |
| | | | |
| SDS Revision Date: | July 27, 2015 | | |
| Notes : | Important Note: This information relates to the sp | ecific product described herein and may not be val | id fo |

Important Note: This information relates to the specific product described herein and may not be valid for this material when used in combination with other raw materials. The information provided is without warranty regarding its accuracy or completeness. The information may not be valid under all conditions. The user has the final responsibility for determining the suitability of the product in a given application.

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