

Safety Data Sheet



Resinall R-770

SECTION 4, FIRST AID MEASURES, Continued

Effects of Overexposure:

- Skin:** Prolonged exposure may cause skin irritation.
- Eyes:** May be considered a nuisance dust causing irritation or mechanical abrasion.
- Ingestion:** No known effects.
- Inhalation:** No known effects may be considered a nuisance dust.

Emergency and First Aid Procedures:

- Eyes:** In case of contact, flush with copious amounts of low pressure water for at least 20 minutes. Call a physician **IMMEDIATELY**.
- Skin:** Wash with mild soap and running water. **MOLTEN RESIN:** If molten resin comes in contact with skin, cool under a running stream of water. Do not attempt to remove the resin from the skin. Removal could result in severe tissue damage.
- Inhalation:** Remove exposed individual to uncontaminated air. Administer Rescue breathing (mouth to mouth) if breathing has stopped. If individual has stopped breathing and does not have a pulse then administer cardio-pulmonary resuscitation (CPR).
- Ingestion:** **DO NOT INDUCE VOMITING.** Vomiting should not be induced due to the possible aspiration hazard. **IMMEDIATELY** see a physician. Never give anything by mouth to an unconscious person.

SECTION 5, FIRE FIGHTING MEASURES

- Suitable Extinguishing Media:** Use dry chemical, foam, or carbon dioxide to extinguish fire. Water may be ineffective, but should be used to cool fire exposed containers, structures and to protect personnel.
- Specific Hazards:** Avoid generating dust, fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.
- Unsuitable Extinguishing Media:** None are known.
- Special Precaution for Firefighters:** Avoid use of water other than light fog or mist. This material may form **Flammable** dust-air mixtures under certain conditions.
- Firefighting Procedures:** Do not flush down sewers or other drainage systems. Exposed firefighters must wear NIOSH-approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

Safety Data Sheet



Resinall R-770

SECTION 6, ACCIDENTAL RELEASE MEASURES

Personal Precautions:

For Non-Emergency Personnel: Contain, collect and reuse, if possible all material. An approved NIOSH/MSHA (Nuisance Dust) respirator may be necessary under certain conditions where airborne contaminants may exceed exposure limits. For optimal eye protection wear goggles or safety glasses with side shields at all times. Other protective equipment that should be worn to minimize exposure is impervious chemical resistant gloves, long pants, long sleeve shirt and protective head wear.

For Emergency Responders: Self-Contained Breathing Apparatus and full turnout gear (Helmet, Coat, Nomex hood, bunker pants, boots and gloves) will give firefighters optimal protection in an emergency situation involving this material.

Emergency Procedure: Dust deposits should not be allowed to accumulate on surfaces, as they may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Secure source of spill if possible. Contain, collect and reuse, if possible all material. This product is considered an OSHA hazardous product, but is not considered a hazardous waste. This material should be disposed of in accordance with all local, state and federal environmental regulations and laws.

Environmental Precautions: Keep spills and cleaning runoff away from drains, surface and ground water.

Methods and Materials for containment and cleaning up: Contain, collect and reuse, if possible all material. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air.) Non-Sparking tools should be used. Some acceptable methods of cleanup are the use of brooms and/or shovels to clean up spilled solid resin. Dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, if material cannot be reused.

SECTION 7, HANDLING AND STORAGE

Precautions for Safe Handling: Bags of material should remain closed until needed. Material should be stored in cool, well ventilated, dry area. Warning – Static charges generated by emptying bags of resin in or near flammable vapors may cause a flash fire. This material may form flammable dust-air mixtures. Avoid ignition sources such as sparks and flame. Ground all equipment. Adequate ventilation should be provided to minimize dust concentrations. Routine housekeeping should be instituted to minimize dust accumulation on surfaces. Dry powder can build static electricity charges when subjected to the friction of transfer and mixing operations.

Conditions for Safe Storage: The maximum recommended storage temperature for this product is 120°F / 49°C. Store in a well ventilated area.

Safety Data Sheet



Resinall R-770

SECTION 8, EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Information:

TLV: Not Established	OSHA PEL: 15 ppm or 5 mg/m ³	(Respirable Fraction)
LD₅₀: Not Established	50 ppm or 15 mg/m ³	(Total Dust)

Carcinogen or Potential Carcinogen: NTP: Not Listed, IARC: Not Listed, OSHA: Not Listed

Engineering Controls:

Ventilation: Use local exhaust ventilation with a minimum capture velocity of 150 ft/min. (0.75 m/sec.) at the point of dust or mist evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Government Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Explosive Dust Handling Controls: It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents, an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks to eliminate the chances of a dust explosion.

Other Protective Equipment: Facilities storing or utilizing this product should be equipped with an eyewash facility and safety showers.

Personal Protective Measures:

Respiratory Protection: A respiratory protection program meeting OSHA 29 CFR § 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. None is required if airborne concentrations are maintained below the TLV/TWA's listed in the "Exposure Limit information".

Eye Protection: Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.

Hand Protection:

Note: Material may cause skin irritation in susceptible individuals. The gloves listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection:

- * Butyl Rubber
- * Nitrile

Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves after use. Wash hands with soap and water.

Other Protection:

Use a chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

Safety Data Sheet



Resinall R-770

SECTION 9, PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Clear Amber Flakes at 77°F, mild odor at room temperature.
pH:	Not Available
Melting Point (°F):	206.6°-221° (97°-105°C)
Boiling Point (°F):	> 500° (260°C)
Flash Point (°F):	≥ 420° (215.6°C) COC
Evaporation Rate (Ether = 1):	Not Available
Flammability (solid, gas):	Not Applicable
Flammability Limits in Air (% by Vol.):	Lower: Not Established Upper: Not Established
Vapor Pressure (mm Hg):	nil @ 200°F
Vapor Density (Air = 1):	0 @ 77°F
Specific Gravity (H ₂ O = 1):	1.054 - 1.094 @ 77°F
Solubility in Water:	Negligible
Auto-ignition Temperature:	Not Established
Percent Volatiles by Volume (%):	0

SECTION 10, STABILITY AND REACTIVITY

Chemical Stability:	This product is considered stable. Hazardous polymerization will not occur.
Possibility of Hazardous Reaction:	No
Conditions to Avoid:	Very high temperature and open flame.
Materials to Avoid:	Avoid mixing with strong oxidants.
Hazardous Decomposition Products:	CO ₂
Hazardous Polymerization Products:	None known.
Hazardous Combustion Products:	Carbon dioxide, carbon monoxide and smoke.

SECTION 11, TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:

Acute Effects:	Eye Contact - May be considered a nuisance dust causing irritation or mechanical abrasion. Skin Contact - May cause skin irritation with prolonged exposure. Inhalation - No known effects may be considered a nuisance dust. Ingestion - No known effects, ingestion should be avoided.
Aspiration Hazard:	Aspiration into the lungs is somewhat unlikely, but it still could potentially occur during ingestion or vomiting causing lung damage or even death due to the resulting pulmonary edema.
Target Organ Effects:	No known effects.
Chronic Effects:	None known under normal use.
Medical Conditions Aggravated by exposure:	No known conditions
Acute Toxicity Values:	Not Established

Safety Data Sheet



Resinall R-770

SECTION 12, ECOLOGICAL INFORMATION

Environmental Toxicity: None Available

Persistence and degradability: No information available.

Bioaccumulative potential: Not expected to have bioaccumulative effects.

Mobility: Accidental spillage will not lead to penetration of the soil and/or groundwater.

Other adverse effects: No known effects.

SECTION 13, DISPOSAL CONSIDERATIONS

Procedure: Contain, collect and reuse, if possible all material. This product is considered an OSHA hazardous substance, but is not considered a hazardous waste. This material should be disposed of in accordance with all local, state and federal environmental regulations and laws. Keep spilled material and cleaning runoff out of municipal sewers and open bodies of water.

SECTION 14, TRANSPORT INFORMATION

UN-number: Not Regulated

UN Proper Shipping Name: Not Applicable

Transport Hazard Class(es): Not Applicable

Packing Group: Not Applicable

Environmental Hazards: None

Labels Required: None

SECTION 15, REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act (SARA Title III):

SARA Title III requires planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) under 40 CFR § 355 (SARA 302, 304, 311 and 312).

TPQ: Not Applicable RQ: Not Applicable

Section 311 / 312: This product has the following hazards that are subject to reporting:

Fire Hazard

Section 313: This product contains no toxic chemicals subject to reporting requirements.

Safety Data Sheet



Resinall R-770

SECTION 15, REGULATORY INFORMATION, Continued

Comprehensive Environmental Response, Compensation and Liability Act, (CERCLA)

Components present in this product meeting reporting requirements:

<u>Substance</u>	<u>CAS Number</u>	<u>Concentration</u>	<u>RQ</u>
None	None	None	None

OSHA Hazard Communication Standard:

This product is subject to inclusion in a Hazard Communication Program containing labeling requirements, Material Safety Data Sheets, and other types of warnings.

Toxic Substances Control Act, (TSCA):

This product is listed in the TSCA Chemical Substance Inventory. The CASRN is proprietary.

Resource Conservation and Recovery Act:

Listed Hazardous Waste: No Characteristic Hazardous Waste: No

State Right to Know Acts, (MA, NJ, PA):

Components subject to reporting are listed in Section 2, Ingredients and Hazards.

California, Proposition 65:

The following statement is made in order to comply with California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

WARNING: This product contains a chemical(s) known to The State of California to cause cancer. **Naphthalene (CAS#: 91-20-3)**

Clean Air Act, Ozone Depleting Chemicals:

This product contains no Class I or Class II Ozone Depleting Chemicals as defined in 40 CFR 82, Subpart E.

Asia Pacific Region Inventories (ASIA-PAC)

This product is listed in the Asian Pacific Region Inventories.

Australian Inventory of Chemical Substances (AICS):

This product is listed in the Australian Inventory of Chemical Substances.

Canadian Environmental protection Act (CEPA):

This product is listed in the Domestic Substance List.

Workplace Hazardous Materials Information System (WHMIS): This product is not a controlled substance as defined by the Canadian WHMIS system.

Safety Data Sheet



Resinall R-770

SECTION 15, REGULATORY INFORMATION, Continued

European Community Directives (EC):

Resinall R-770 is a proprietary polymer that does not pose any human exposure hazard or environmental hazard and is subject to "Point 9.3 of Annex VI to Directive 67/548/EEC which contains provisions that preparations containing polymers or elastomers need not be labeled in accordance with Article 10 or Annex V B.9 of the Directive, if they do not present a hazard to human health by inhalation, ingestion or contact with the skin, or to the aquatic environment in the form in which they are placed on the market...", 99/45/EC 7.2.5.

European Inventory of Existing Chemical Substances (EINECS):

All constituents of this product are listed in the European Inventory of Existing Chemical Substances.

European List of Notified Chemical Substances (ELINCS)

This product is not listed in the European List of Notified Chemical Substances.

European Registration, Evaluation and Authorization of Chemicals (REACH):

Resinall EU has pre-registered or registered all substances or pre-cursor substances necessary for Resinall EU to import Resinall products into the EU as required by EU REACH regulations. If you choose to import products containing Resinall products into the EU, the importing entity will be responsible for ALL registration requirements as required under EU REACH regulations. Resinall and/or Resinall EU will provide available product formulary information to an independent Only Representative of the importing entity under a mutual non-disclosure agreement. If you have any questions, please contact Henry G. Boswell at hboswell@resinall.com.

Inventory of Existing Chemical Substances in China (IECSC):

This product is listed in the Inventory of Existing Chemical Substances in China.

Japanese Existing and New Chemical Substances (ENCS):

This product is listed in the Japanese Existing and New Chemical Substances.

Korean Existing Chemicals List (ECL):

This product is listed in the Korean Existing Chemicals List.

New Zealand Inventory of Chemicals (NZIoC):

This product is listed in the New Zealand Inventory of Chemicals.

Philippines Inventory of Chemicals and Chemical Substances (PICCS):

This product is listed in the Philippines Inventory of Chemicals and Chemical Substances.

Safety Data Sheet



Resinall R-770

SECTION 15, REGULATORY INFORMATION, Continued

Proposed Israel Hazardous Substance List (ISRAEL):

This product is not listed in the Proposed Israel Hazardous Substance List.

Swiss Giftliste 1 and Inventory of Notified New Substances (SWISS):

This product is not listed in the Swiss Giftliste 1 and Inventory of Notified New Substances.

Taiwan Toxic Chemical Substances List (TAIWAN):

This product is not listed in the Taiwan Toxic Chemical Substances List.

SECTION 16, OTHER INFORMATION

Preparation Date:	October 9, 2014								
Revision Indicator:	3 (Replaces SDS dated May 23, 2013)								
Reason for Revision:	Updated REACH Statement in Section 15.								
HMIS Rating:	<table><tr><td>Health:</td><td>1</td></tr><tr><td>Flammability:</td><td>1</td></tr><tr><td>Reactivity:</td><td>0</td></tr><tr><td>Personal Protection:</td><td>E</td></tr></table>	Health:	1	Flammability:	1	Reactivity:	0	Personal Protection:	E
Health:	1								
Flammability:	1								
Reactivity:	0								
Personal Protection:	E								

* HMIS: Minimal = 0, Slight = 1, Moderate = 2, Serious = 3, Severe = 4.
E = Safety Glasses, Gloves and a Dust Respirator.

Abbreviations:

GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
OSHA:	Occupational Safety and Health Administration
RQ:	Reportable Quantity
TLV:	Threshold Limit Value
TPQ:	Threshold Planning Quantity
TWA:	Time Weighted Average
PEL:	Permissible Exposure Limit
NTP:	National Toxicology Program
IARC:	International Agency for Research on Cancer
ANSI:	American National Standards Institute

This Safety Data Sheet (SDS) complies with the Globally Harmonized System of Classification and Labeling of Chemicals Standard. Resinall Corporation believes that this information is accurate and reliable as of the date this Safety Data Sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. Resinall Corporation makes no warranty to, and disclaims all liability from, reliance on this data.