


Natro-Rez™ 10

1: Identification

Product identifier:	Natro-Rez™ 10	
Other means of identification:	Coumarone-indene resin	
Supplier:		NATROCHEM, Inc. P.O. Box 1205 Savannah, GA 31402-1205 912-236-4464
Recommended use:	Adhesives, coatings, rubber	
Restrictions on use:	Not applicable.	
Emergency phone number:	CHEMTREC (USA)	800-424-9300
	CHEMTREC (Int'l)	202-483-7616

2: Hazard(s) identification

GHS classification:	Flammable liquid – Category 4 Specific target organ toxicity, single exposure – Category 3 (central nervous system, respiratory system) Specific target organ toxicity, repeated exposure – Category 2 (skin) Aspiration hazard – Category 1
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GHS label elements

Signal word:

DANGER

Symbol(s):



Hazard statements:

H227: Combustible liquid
H304: May be fatal if swallowed and enters airways
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness
H372: Causes damage to skin through prolonged or repeated exposure
Contact with molten (hot) material may cause thermal burns.

Hazards not otherwise classified:

Precautionary statements:

Prevention:

Keep away from sources of ignition – No smoking.
Do not breathe dust, mist, fumes, or vapours.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/clothing and eye/face protection.

Response:

In case of fire: use appropriate media for extinction.
IF INHALED: Remove person to fresh air and keep comfortable for

	breathing. Call a POISON CENTER/doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER/doctor. DO NOT induce vomiting.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.
Disposal:	Dispose of contents/container in accordance with applicable regulations.
Supplemental information:	Not applicable.

3: Composition

Ingredient	Synonyms	CAS number	Concentration (%)
Coumarone-indene resin		63393-89-5	Trade secret
Naphtha, petroleum, aromatic-containing		68603-08-7	Trade secret

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Contaminants

Naphthalene (91-20-3) is contained in most of the raw materials for this product as a non-reactive, non-intentional material. It has a relatively high boiling point (218°C) and has a great affinity for petroleum hydrocarbon resins and thus is very difficult to remove completely from the resins. This product typically contains less than 500 ppm of naphthalene.

4: First-aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM, OR PHYSICIAN immediately; have SDS information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use

Ingestion: solvents or thinners.
If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed.

Potential acute health effects

Eye contact: Mild eye irritation.
Inhalation: Respiratory tract irritation, nervous system damage.
Skin contact: Mild skin irritation. May cause damage to skin through prolonged or repeated exposure.
Ingestion: Aspiration hazard.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments: No specific treatment.
Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Use dry chemical, CO₂, water spray (fog), or foam.
Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical: Avoid generating vapours; vapours dispersed in air in sufficient concentrations and in the presence of an ignition source are a potential explosion hazard. Vapours are heavier than air and can collect in low areas; vapours can travel to an ignition source and flash back.

Hazardous thermal decomposition products: In the event of a fire, hazardous decomposition products may include:
 Carbon monoxide
 Carbon dioxide
 Other unidentified organic compounds

Special protective actions for firefighters: No action shall be taken involving any personal risk or without proper training.

Special protective equipment for firefighters: Firefighters and others who may be exposed to products of combustion should wear full firefighting turn out gear (full bunker gear) and self-contained breathing apparatus (SCBA) operated in pressure-demand mode (MSHA/NIOSH approved or equivalent).

6: Accidental release measures

Personal precautions, protective equipment, and emergency procedures

For non-emergency personnel: Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Product forms slippery surface when combined with water. No action shall be taken involving any personal risk or without suitable training.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in **Section 8** on suitable and unsuitable materials. See also the information immediately above in "For non-emergency personnel".

Environmental precautions: Avoid release to sewers, waterways, soil, or air. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up

Small spill: Use non-sparking tools and equipment. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. In case of spillage, stop the flow of material and block any potential routes to water systems

Large spill: Use non-sparking tools and equipment. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. In case of spillage, stop the flow of material and block any potential routes to water systems

See **Section 1** for emergency contact information.

See **Section 8** for information on appropriate personal protective equipment.

See **Section 13** for additional waste treatment information.

7: Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see **Section 8**). Avoid contact with molten (hot) material.

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. When transferring material into flammable solvents, use proper grounding to avoid electrical sparks. Avoid alteration of product properties before use. Calcining (which may result in crystalline silica formation) or mixing with additives may alter toxicological properties.

Conditions for safe storage, including any incompatibilities: See also **Section 8** for additional information on hygiene measures. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area away from incompatible materials (see **Section 10**) and food and drink. Keep container tightly closed and sealed until ready for use.

Do not store in unlabeled containers.

Keep away from: strong oxidizing materials; combustible materials

8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient	OSHA PEL	ACGIH TLV	NIOSH REL
Naphthalene	50 mg/m ³ TWA 10 ppm TWA	10 ppm TWA 15 ppm STEL Skin – potential significant contribution to overall exposure by the cutaneous route	50 mg/m ³ TWA 10 ppm TWA 75 mg/m ³ STEL 15 ppm STEL 250 ppm IDLH

Recommended monitoring procedures:

If this product contains ingredients with exposure limits, personal, workplace atmosphere, or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls:

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure that they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, or engineering modifications to process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures:

Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory, and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: splash goggles.

Skin protection

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. When

	handling hot material, wear heat-resistant gloves that are able to withstand the temperature of molten product.
Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection:	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

9: Physical and chemical properties

Appearance

Physical state:	Viscous liquid
Color:	Amber
Odor:	Petroleum odor
Odor threshold:	Not available.
pH:	Not available.
Softening point (ring and ball):	10 ± 5°C
Melting/freezing point:	Not available.
Boiling point and range:	≥ 325°C
Flash point:	≥ 330°F
Evaporation rate:	< 1
Flammability:	Combustible liquid
Flammability or explosive limits:	Not available.
Vapor pressure:	Not available.
Vapor density:	> 1
Relative density:	Approximately 1.04 @ 25°C
Solubility:	Not available.
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not applicable.

10: Stability and reactivity

Reactivity:	None known.
Chemical stability:	This product is stable at normal temperature and pressure.

Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	Avoid heat, flames, and other sources of ignition. Avoid contact with incompatible materials. Avoid generating dust. Avoid contact with molten material. Refer to protective measures listed in Sections 7 and 8.
Incompatible materials:	Reactive or incompatible with the following materials: Strong oxidizing materials
Hazardous decomposition products:	In the event of a fire, hazardous decomposition products may include: Carbon monoxide Carbon dioxide Other unidentified organic compounds

11: Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/summary: No known significant effects or critical hazards.

Ingredient	Result	Species	Dose	Exposure
Naphthalene	LD ₅₀ oral	Rat	1110 mg/kg	-
	LD ₅₀ dermal	Rabbit	1120 mg/kg	-
	LC ₅₀ inhalation	Rat	> 340 mg/kg	1 hr

Irritation/corrosion

Conclusion/summary

Skin: No known significant effects or critical hazards.

Eyes: No known significant effects or critical hazards.

Respiratory: May cause respiratory irritation.

Sensitization

Conclusion/summary:

Skin: No known significant effects or critical hazards.

Respiratory: No known significant effects or critical hazards.

Mutagenicity:

Conclusion/summary: No known significant effects or critical hazards.

Carcinogenicity

Conclusion/summary: No known significant effects or critical hazards.

Classification

Ingredient	OSHA	IARC	NTP
Naphthalene	+	2B	Reasonably anticipated to be a human carcinogen

Carcinogen classification code:

IARC: 1, 2A, 2B, 3, 4

NTP: [Known/Reasonably anticipated] to be a human carcinogen

OSHA: +

Not listed/regulated: -

Reproductive toxicity

Conclusion/summary: No known significant effects or critical hazards.

Teratogenicity**Conclusion/summary:** No known significant effects or critical hazards.**Specific target organ toxicity (single exposure)**

Not available.

Specific target organ toxicity (repeated exposure)**Conclusion/summary:** May cause damage to skin through prolonged or repeated exposure.**Target organs**

Skin, central nervous system, respiratory system

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation.**Potential acute health effects****Eye contact:** No known significant effects or critical hazards.**Inhalation:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause drowsiness and dizziness or irritation of the nose, throat, and lungs.**Skin contact:** Prolonged or repeated contact may damage skin.**Ingestion:** May be fatal if swallowed and enters airways.**Symptoms related to the physical, chemical, and toxicological characteristics****Eye contact:** No known significant effects or critical hazards.**Inhalation:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause drowsiness and dizziness or irritation of the nose, throat, and lungs.**Skin contact:** Prolonged or repeated contact may damage skin.**Ingestion:** May be fatal if swallowed and enters airways.**Delayed and immediate effects and also chronic effects from short- and long-term exposure****Short-term exposure****Potential immediate effects** Symptoms may include mild skin irritation, mild eye irritation, nervous system damage, respiratory tract irritation, and aspiration hazard.**Potential delayed effects** May cause damage to skin through prolonged or repeated exposure.**Long-term exposure****Potential immediate effects** Symptoms may include mild skin irritation, mild eye irritation, nervous system damage, respiratory tract irritation, and aspiration hazard.**Potential delayed effects** May cause damage to skin through prolonged or repeated exposure.**Potential chronic health effects****General:** No known significant effects or critical hazards.**Carcinogenicity:** No known significant effects or critical hazards.**Mutagenicity:** No known significant effects or critical hazards.**Teratogenicity:** No known significant effects or critical hazards.**Developmental effects:** No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

12: Ecological information

Toxicity

Ingredient	Result	Species	Exposure
Naphthalene	LC50 5.74-6.44 mg/L	Fish – <i>pimephales promelas</i>	96 hr flow-thru
	LC50 1.6 mg/L	Fish – <i>oncorhyncus mykiss</i>	96 hr flow-thru
	LC50 0.91-2.82 mg/L	Fish – <i>oncorhyncus mykiss</i>	96 hr static
	LC50 1.99 mg/L	Fish – <i>pimephales promelas</i>	96 hr static
	LC50 31.0265 mg/L	Fish – <i>lepomis macrochirus</i>	96 hr static
	EC50 0.4 mg/L	Algae – <i>skeletonoma costatum</i>	72 hr
	EC50 2.16 mg/L	Daphnia – <i>daphnia magna</i>	48 hr
	EC50 1.96 mg/L	Daphnia – <i>daphnia magna</i>	48 hr flow-thru
	EC50 1.09-3.4 mg/L	Daphnia – <i>daphnia magna</i>	48 hr static

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

Soil/water partition coefficient (K_{oc}): Not available.

Other adverse effects: No known significant effects or critical hazards.

13: Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions, and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Refer to Sections 6, 7, and 8 for additional information on accidental release measures, handling and storage, and exposure controls.

14: Transport information

	DOT	IMDG	IATA
UN number	Not regulated in non-bulk packaging	Not regulated in non-bulk packaging	Not regulated in non-bulk packaging
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.
Additional information	-	-	-

Special precautions for user:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

Not available.

15: Regulatory information

Inventory status

United States inventory (TSCA 8b):	All components are listed or exempted.
Australia inventory (AICS):	All components are listed or exempted.
Canada inventory (DSL):	All components are listed or exempted.
Europe inventory (REACH):	All components are listed or exempted.
Japan inventory (ENCS):	Not listed.
Korea inventory (KECI):	All components are listed or exempted.
New Zealand inventory (NZIoC):	All components are listed or exempted.

United States

US Federal regulations:

SARA Title III

Section 302 – Extremely Hazardous Chemicals:

The components in this product are either not SARA Section 302 regulated or are regulated but present in negligible concentrations.

Section 311/312 – Hazard Categories:

Chronic health

Section 313 – Toxic Chemicals:

Naphthalene: 0.1% de minimis concentration

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Reportable Quantity (RQ)

Naphthalene: 100 lb (45.4 kg) final RQ

US State regulations:

Ingredient	NJ RTK	MA RTK	PN RTK	CA Prop. 65
Naphtha, petroleum, aromatic-containing	Not listed	Not listed	Not listed	Not listed
Naphthalene	Listed	Listed	Listed	Listed

16: Other information

Hazardous Material Identification System (USA)

HEALTH	*	1
FLAMMABILITY		1
REACTIVITY		0
PERSONAL PROTECTION		

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1901.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the Nation Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J.J.Keller 800-327-6868.

* - chronic effects

The customer is responsible for determining the PPE code for this material.

Key to abbreviations:

ATE	Acute toxicity estimate
BCF	Bioconcentration factor
GHS	Globally Harmonized System of classification and labeling of chemicals
IATA	International Air Transport Association
IBC	Intermediate bulk container
IMDG	International Maritime Dangerous Goods
LogPow	Logarithm of the octanol/water partition coefficient
MARPOL 73/78	International convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978. (MARPOL = marine pollution)
UN	United Nations

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