Natro-Cel™ 150N-A

1: Identification

Product identifier: Natro-Cel[™] 150N-A

Other means of identification: Naphthenic oil on silicon dioxide

Supplier:

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NATROCHEM, Inc. P.O. Box 1205

Savannah, GA 31402-1205

912-236-4464

Recommended use: Rubber compounding

Restrictions on use: Not applicable.

Emergency phone number: CHEMTREC (USA) 800-424-9300

CHEMTREC (Int'l) 202-483-7616

2: Hazard(s) identification

OSHA/HCS status: While this material is not considered hazardous by the OSHA

Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

GHS classification: Not classified.

GHS label elements

Signal word: WARNING Symbol(s): None.
Hazard statements: None.

Hazards not otherwise

classified:

May form combustible dust concentrations in the air.

Precautionary statements:

Prevention:None.Response:None.Storage:None.Disposal:None.

Supplemental information: Not applicable.

3: Composition

Substance/mixture: Mixture

Ingredient	Synonyms	CAS number	Concentration (%)
Distillates (petroleum),		64742-52-5	70-74
hydrotreated heavy naphthenic			
Silica, amorphous, precipitated,		112926-00-8	26-30
and gel			

Contains no detectable crystalline silica (detection limit <0.01% by weight)

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

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

solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show this

container or label. Wash out mouth with water. Keep person warm

and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed.

Potential acute health effects

Eye contact: No significant irritation expected other than possible mechanical

irritation.

Inhalation: Exposure to airborne concentrations above statutory or

recommended exposure limits may cause irritation of the nose,

throat, and lungs.

Skin contact: Prolonged or repeated contact may dry skin and cause irritation.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

Irritation Redness

Inhalation: Adverse symptoms may include the following:

Coughing

Respiratory tract irritation

Skin contact: Adverse symptoms may include the following:

Dryness

Ingestion: No specific data.

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:

Unsuitable extinguishing

Specific hazards arising from

media:

Do not use a solid water stream as it may scatter and spread fire.

Use an extinguishing agent suitable for the surrounding fire.

Product forms a slippery surface when combined with water.

the chemical: Fine dust clouds may form explosive mixtures with air.

Hazardous thermal In the event of a fire, hazardous decomposition products may

decomposition products: 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 Firefighters and others who may be exposed to products of

equipment for firefighters: 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 Keep unnecessary and unprotected personnel from entering. Do **personnel:** 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: Avoid generating dust. Vacuum or sweep up material and place in a

designated, labeled waste container.

Large spill: Avoid generating dust. Vacuum or sweep up material and place in a

designated, labeled waste container.

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

occupational hygiene:

Precautions for safe handling

Protective measures: P
Advice on general E

Put on appropriate personal protective equipment (see **Section 8**). 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.

See also **Section 8** for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities:

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.

8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient	OSHA PEL	ACGIH TLV	NIOSH REL
Distillates (petroleum),	5 mg/m ³ TWA 8 hr	5 mg/m ³ TWA 8 hr	5 mg/m ³ TWA 10 hr
hydrotreated heavy			10 mg/m ³ STEL 15
naphthenic			min

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

Environmental exposure

exposure to airborne contaminants.

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

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, airpurifying 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: Powder, solid, or granular solid.

Color: White to off-white.

Odor: Hydrocarbon. Odor threshold: Not available. pH: Not available. Melting/freezing point: Not available. **Boiling point and range:** Not available. Flash point: Not available. **Evaporation rate:** Not available. Flammability: Not available. Flammability or explosive Not available.

limits:

Vapor pressure:Not available.Vapor density:Not available.Relative density:Not available.Solubility:Insoluble in water.

Partition coefficient: n- >6

octanol/water:

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not applicable.

10: Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product

or its ingredients.

Chemical stability: This product is stable.

Possibility of hazardous Under normal conditions of storage and use, hazardous reactions

reactions: will not occur.

Conditions to avoid: High temperature (>800°C) treatment (calcining), which may result

in crystalline silica formation.

Avoid alteration of product properties before use. Calcining or

mixing with additives may alter toxicological properties.

Avoid generating dust.

Refer to protective measures listed in **Sections 7 and 8**.

Reactive or incompatible with the following materials:

Incompatible materials: Reactive or incompatible with the following materials:

Acids

Oxidizing materials

Strong alkalis

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
Distillates (petroleum),	LD ₅₀ oral	Rat	>5,000 mg/kg	-
hydrotreated heavy	LD ₅₀ dermal	Rabbit	>2,000 mg/kg	-
naphthenic	LC ₅₀ inhalation	Rat	5.7 mg/L	4 hr

Irritation/corrosion

Conclusion/summary

Skin: No known significant effects or critical hazards. **Eyes:** No known significant effects or critical hazards. **Respiratory:** No known significant effects or critical hazards.

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: The classification as a carcinogen need not apply as it can be

shown that the mixture contains less than 3% DMSO extract as

measured by IP 346.

Classification

Ingredient	OSHA	IARC	NTP
Silica, amorphous,	-	3	-
precipitated, and gel			

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)

Not available.

<u>Target organs</u> Contains material which may cause damage to the following

organs: upper respiratory tract, eyes.

Aspiration hazard

Not available.

Information on the likely routes Routes of entry anticipated: oral, dermal, inhalation.

of exposure:

Potential acute health effects

Eye contact: No significant irritation expected other than possible mechanical

irritation.

Inhalation: Exposure to airborne concentrations above statutory or

recommended exposure limits may cause irritation of the nose,

throat, and lungs.

Skin contact: Prolonged or repeated contact may dry skin and cause irritation.

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical, and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

Irritation Redness

Inhalation: Adverse symptoms may include the following:

Coughing

Respiratory tract irritation

Skin contact: Adverse symptoms may include the following:

Dryness

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short- and longterm exposure

Conclusion/summary: An epidemiological study was conducted which included 165

precipitated silica workers who had been exposed an average time of 8.6 years. Of these 165 workers, 44 had been exposed for an average of 18 years. No adverse effects were noted in complete medical examinations (including chest roentgenograms) of these workers. Pulmonary function decrements were correlated only with smoking and age but not with the degree or duration of dust exposures. Laboratory studies have also been conducted in small animals via inhalation of levels of precipitated silica dust of up to 126 mg/m³ per periods from six months to two years. Although precipitated silica was temporarily deposited in animals' lungs, most of the deposited material was cleared soon after the dust exposure ended. The results of all studies performed by, or known to, PPG indicated a very low order of pulmonary activity for synthetic precipitated silicas. PPG recommends that persons with

synthetic precipitated silicas. PPG recommends that persons with breathing problems or lung disease should not work in dusty areas unless a physician approves and certifies their fitness to wear

respiratory protection.

Short-term exposure

Potential immediate

effects

No significant irritation expected other than possible mechanical irritation.

Potential delayed effects

Prolonged or repeated contact may dry skin and cause irritation.

Long-term exposure

Potential immediate Repeated or prolonged inhalation of dust may lead to chronic

effects respiratory irritation.

Potential delayed effects Repeated or prolonged inhalation of dust may lead to chronic

respiratory irritation.

Potential chronic health effects

General:
No known significant effects or critical hazards.
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.
No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

12: Ecological information

Toxicity

Ingredient	Result	Species	Exposure
Silica, amorphous, precipitated, and	NOEC > 1000 ppm	Daphnia – daphnia magna	24 hours
gel	Acute NOEC > 10000 ppm	Fish	96 hours static
	fresh water		
	Acute NOEC > 10000 ppm	Fish – brachydanio rerio	4 days static
Distillates	Acute EC50 > 100 mg/L	Algae	72 hr
(petroleum),	Acute EC50 > 100 mg/L	Crustaceans	48 hr
hydrotreated heavy	Acute LC50 > 100 mg/L	Fish	96 hr
naphthenic			

Persistence and degradability

Ingredient	Aquatic half-life	Photolysis	Biodegradability
Silica, amorphous, precipitated, and gel	-	-	Not readily
Distillates (petroleum), hydrotreated heavy naphthenic	-	-	Inherent

Bioaccumulative potential

Ingredient	LogP _{ow}	BCF	Potential
Silica, amorphous, precipitated, and	-	0	low
gel			
Distillates	≻ 6	-	high
(petroleum),			
hydrotreated heavy			
naphthenic			

Mobility in soil

Not available. Soil/water partition

coefficient (Koc):

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.	Not regulated.	Not regulated.
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 All components are listed or exempted.

8b):

Australia inventory (AICS):
Canada inventory (DSL):
China inventory (IECSC):
Europe inventory (REACH):

All components are listed or exempted.

Japan inventory (ENCS): Please contact your supplier for information on the inventory

status of this material.

Korea inventory (KECI): All components are listed or exempted. **New Zealand inventory** All components are listed or exempted.

(NZIoC):

Philippines inventory (PICCS): 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:

The components in this product are either not SARA Section 311/312 regulated or are regulated but present in negligible concentrations.

Ingredient	Acute	Chronic	Fire	Pressure	Reactive
Distillates	Yes	No	No	No	No
(petroleum),					
hydrotreated					
heavy naphthenic					

Section 313 – Toxic Chemicals:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.

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

The components of this product are either not CERCLA regulated, regulated but present in negligible concentrations, or regulated with no assigned reportable quantity.

US State regulations:

Ingredient	NJ RTK	MA RTK	PN RTK	CA Prop. 65
Silica, amorphous,	Listed	-	-	-
precipitate, and gel				
Distillates (petroleum),	Listed	Not listed	Not listed	Not listed
hydrotreated heavy				
naphthenic				

16: Other information

Hazardous Material Identification System (USA)



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.

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

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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^{* -} chronic effects

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