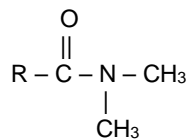


Product Name

### NINOL® CAA

Chemical Structure



R = C<sub>11</sub> or C<sub>13</sub>

Chemical Description

NINOL CAA is a dimethyl amide made from saturated, vegetable-derived C<sub>12</sub>-C<sub>14</sub> carbon chains.

CAS Registry No.

3007-53-2 and 3015-65-4

INCI Name

Dimethyl Lauramide/Myristamide

Applications

Functional Properties

- Fragrance solubilizer
- Active ingredient solubilizer
- Foam stabilizer
- Foam booster
- Viscosity booster

End Product Uses

- Shampoos
- Body washes
- Liquid soaps
- Facial cleansers
- Bubble baths
- Deodorants

Typical Properties

BCI (Biorenewable Carbon Index).....	86
Actives (wt %) .....	100
Appearance at 25 °C.....	Clear to slightly hazy liquid
Density at 25 °C, g/ml (lbs/U.S. gal).....	0.87 (7.3)
Average Molecular Weight (g/mol) .....	234
Moisture, % .....	0.1
Viscosity at 25 °C, cps .....	8
Acid Value, meq/g KOH .....	<4
pH, 5% in 1:1 IPA/H <sub>2</sub> O .....	4.6
Flash Point, PMCC, °C (°F).....	166 (331)
Pour Point, °C (°F) .....	11 (52)
Cloud Point, °C (°F).....	<11 (<52)
Boiling Point, °C (°F).....	174 (345)
Freeze Point, °C (°F).....	11 (52)
Melting Point, °C (°F) .....	14 (57)
Color, Gardner .....	<1
Color, APHA.....	30
Refractive Index at 20 °C .....	1.45
Surface Tension (as is), dynes/cm .....	30.8
Dielectric Constant at 25 °C .....	12.91
 <u>Solubility</u>	
NINOL CAA in water (25 °C; %wt.) .....	0.01
Water in NINOL CAA (25 °C; %wt.) .....	1
Methanol .....	Soluble
Kerosene.....	Soluble
Xylene .....	Soluble
Hansen Solubility Parameters .....	δD: 17.3, δP: 8.0, δH: 9.1



Environmental Effects

Product is readily biodegradable. A detailed biodegradation statement is available upon request.

Health Effects

NINOL CAA is slightly toxic orally (LD<sub>50</sub>=1,750 mg/kg). It causes mild skin and eye irritation.

Storage & Handling

Normal safety precautions (i.e., gloves and safety goggles) should be employed when handling NINOL CAA. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling material.

**Storage Information:** Stainless steel storage vessels are recommended. It is recommended that NINOL CAA be stored in sealed containers at temperatures between 55 °F (12 °C) and 120 °F (49 °C). Avoid overheating or freezing. If material is frozen, mild heat and agitation are recommended to ensure the material is homogeneous before use. Temperatures up to 130 °F (54 °C) can be maintained for long periods of time without degradation of the product.

**Standard Packaging:** NINOL CAA is available in 55 gallon drums (net weight 375 lb/170 kg) and bulk quantities.

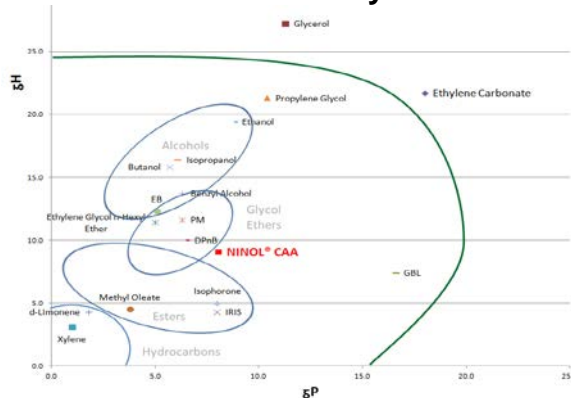
Clearances

All components of NINOL CAA are listed in the following countries, the registration numbers for the active ingredients are listed in parentheses: Europe (EINECS 221-117-5 & 221-151-0), United States (TSCA 3007-53-2 & 3015-65-4), Australia (3007-53-2 & 3015-65-4) and Japan (ENCS No. 2-825).

**It is the responsibility of the end user to review the chemical control regulations for each country.**

The Hansen solubility parameters are a key characteristic of solvency power used to predict if one material will dissolve another one to form a solution. As shown in the graph below, NINOL CAA has a large Hansen space.

### Hansen Solubility Solvents Map



Product Stewardship

This product bulletin has been written in accordance with ACC's Product Stewardship guidelines.

Additional Safety Information

A Safety Data Sheet is available upon request.



The information contained herein is based on the manufacturer's own study and the works of others and is subject to change without prior notice. The information is not intended to be all-inclusive, including as to the manner and conditions of use, handling, storage or disposal or other factors that may involve additional legal, environmental, safety or performance considerations. Nothing contained herein grants or extends a license, express or implied, in connection with any patents issued or pending of the manufacturer or others, or shall be construed as a recommendation to infringe any patents or to violate any applicable laws. STEPAN COMPANY MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR USE, AND NO WARRANTY OR GUARANTY OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE, INCLUDING REGARDING PERFORMANCE, SAFETY, SUITABILITY, STABILITY, ACCURACY, COMPLETENESS, ADEQUACY OR OTHERWISE. Stepan Company (and its employees, subsidiaries and affiliates) shall not be liable (regardless of fault) to the vendee, its employees, or any other party in respect of this information, including in respect of its accuracy, completeness, adequacy, furnishing, use, or reliance upon, and the vendee assumes and releases Stepan Company (and its employees, subsidiaries and affiliates) from all liability, whether in tort, contract or otherwise to the fullest extent possible under the relevant law.

**Stepan**   
**Corporate Headquarters**  
**Northfield, Illinois 60093, U.S.A.**  
**Phone: 847-446-2500**  
**Fax: 874-501-2100**  
**Website: www.stepan.com**

**For Technical Service Call:**  
Stepan North America **+1-800-745-7837**  
Stepan Mexico **+55-11-5089-2208**  
Stepan Quimica **+55-11-5089-2200**  
Stepan Colombia **+571-636-2808**  
Stepan Europe **+33-476-505-160**  
Stepan Asia **+656-879-9855**  
Stepan Philippines **+656-879-9855**

**For Customer Service Call:**  
Stepan North America **+1-800-457-7673**  
Stepan Mexico **+52-555-533-1967**  
Stepan Quimica **+55-11-5089-2200**  
Stepan Colombia **+57-6-8993125**  
Stepan UK **+44-161-338-5511**  
Stepan France **+33-476-50-51-00**  
Stepan Philippines **+63-2-842-7951**