

**NA Chemical Inc.**  
**MATERIAL SAFETY DATA SHEET**

**Section 1. Product and Company Identification**

Product Name: NAC 100  
Supplier: NA Chemical Inc.  
1000 Highland Ave.  
Cambridge, Ohio 43725

DATE: 1/6/2014  
REV. 01

Product Code: NAC 100  
In Case of emergency: Chemtrec 800-424-9300  
Product type: Drilling Fomer Soap

**Section 2. Composition / Information on Ingredients**

Name	CAS Number		% by weight	ppm
Hexylene Glycol	107-41-5		6%	25

There are no aditional 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 do not require reporting in this section.

**Section 3. Hazardous Identification**

Emergency Overview: Prolonged and or repeated contact may cause mild irritation or redness to eyes and skin.  
Physical state: Liquid  
Color: Clear/ yellow

Precautionary measures: Use personnal protective gear and appropriate handling measures to control/ reduce hazards associated with contact with eyes, skin, ingestion, inhalation and environmental release.

Routes of entry: Eyes, skin, inhalation, ingestion

**Potential acute health effects**

Inhalation: No significant effects expected from a single short-term exposure. Inhalation of vapors, mists or dusts of the product may be irritating to the respiratory system.

Ingestion: Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausia and diarrhea.

Skin: Prolonged and or repeated contact may cause mild irritation or redness.

Eyes: Prolonged and or repeated contact may cause mild irritation or redness.

**See toxicological information sect 11**

**Section 4. First Aid Measures**

First Aid for Eye: Check for and remove any contact lens. Immediately flush eyes with plenty of water for at least 15 minutes, occationally lifting the upper and lower eyelids. Get medical attention immediately.

First Aid for Skin: In case of contact, immediately flush skin with plenty of water fo rat least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse.

First Aid for Inhalation: Move exposed person to fresh air. If not breathing, is irregular or if respiratory arrests occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as collar, tie, belt or waistband. Get medical attention immediately.

First Aid for Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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**Section 5. Fire Fighting Measures**

Flash point (°F)	>217
Extinguishing media	Water, CO <sub>2</sub> , dry chemical, or synthetic foam.
Special exposure hazards	None known.
Decomposition products	Decomposition of this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons such as sulfur oxide.
Special Protective equipment for fire fighters	Fire fighters should wear appropriate protective equipment and self contained breathing apparatus(SCBA) with a full face-piece operated in positive pressure mode.

**Section 6. Accidental Release Measures**

Personal precautions	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal equipment (see section 8).
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewer, waterways, soil, or air).
Methods for cleaning up	
Small Spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large Spill	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillage into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or idatomaceous earth and place in container for disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note see Section 1 for emergency contact information and section 13 for waste disposal.

**Section 7. Handling and Storage**

Handling & Storing:	Put appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where 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. Do not breathe vapor or mist. Do not swallow. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	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. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**Section 8. Exposure Controls / Personal Protective Equipment**

Ingredient	Exposure limits		
	ACGIH TLV (United States)		
	TWA:	ppm	hours
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.		

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**Section 8. Exposure Controls / Personal Protective Equipment (cont'd)**

<b>Engineering measures</b>	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
<b>Hygiene measures</b>	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 clothes before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Personal protection</b>	
<b>Respiratory</b>	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.
<b>Hands</b>	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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
<b>Eyes</b>	Safety eyewear complying with an approved standard should be use when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible chemical splash goggles should be worn (unless the assessment indicates a higher degree of protection).
<b>Skin</b>	Personal protective equipment for the body should be selected based on the task being performed and the risks invovled and should be approved by a specialist before handling this product.
<b>Environmental exposure controls</b>	Emissions form ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Section 9. Physical and Chemical Properties**

<b>Physcial state</b>	liquid (mobile, liquid)
<b>Flash point (°F)</b>	> 217
<b>Apearance @ 70°F</b>	Clear, yellow
<b>Boiling point (°F)</b>	>212
<b>Relative density (lbs/gal)</b>	8.8916
<b>Vapor density</b>	Estminated slower than ethyl ether
<b>Evaporation rate</b>	Estimated lighter than air
<b>pH</b>	7
<b>Solubility in water</b>	Soluable

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**Section 10. Stability and Reactivity**

**Chemical Stability:** Stable

**Conditions to avoid** This product may react with strong oxidizing agents and or alkalis.

**Incompatible materials** This product may react with strong oxidizing agents and or alkalis.

**Hazardous decomposition products** Decomposition of this product may yeild oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons.

**Hazardous Polymerization** Under normal conditons of stoage and use, hazardous reactions will not occur.

**Section 11. Toxicological Information**

**Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
No data provided at this time				

**Chronic toxicity**

**Conclusion/Summary** No data available at this time

**Carcinogenicity**

**Conclusion/Summary** No data available at this time

**Mutagenicity**

**Conclusion/Summary** No data available at this time

**Teratogenicity**

**Conclusion/Summary** No data available at this time

**Reproductive toxicity**

**Conclusion/Summary** No data available at this time

**Section 12. Ecological Information**

**Exotoxicity** No data available at this time

**Aquatic exotoxicity**

**Conclusion/Summary** No data available at this time

**Persistence/degradability**

**Conclusion/Summary** No data available at this time

**Section 13. Disposable Considerations**

**Water disposal** 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 of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be dosposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and it container must be disposed of in a safe way. Care should be take when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8 Exposure Control/Personal Protection for additional handling information and protection of employees.

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**Section 14. Transportation Information**

Regulatory Information	UN Number	Proper shipping name	Classes	PG*	Label	Additional Information
DOT Classification	Not regulated					
IMDG Class	Not regulated					
IATA-DGR Class	Not regulated					

PG\* Packing Group

**Section 15. Regulatory Information**

This is an experimental product being supplied under TSCA R&D exemption (40 CFR 720.36).

**Section 16. Other Information**

Neither this data sheet nor any statement contained herein grants or extends any licence, express or implied in connection with patents issued or pending which may be the property of the manufacturer or others.

Information in this Data Sheet has been assembled by the manufacturer based on its own study and on the work of others.

The manufacturer makes no warranties, express or implied as to the accuracy, completeness or adequacy of the information contained herein.

The manufacturer shall not be liable (regardless of fault) to the vendee, the vendee's employees or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing such information.

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.