SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: **CALFORM NX**
Product Description: Hydrocarbons and Additives
Product Code: 152017-85, 166009-85, 169854-85, 169938-85, 179200-85, 708095-85, 708122-85, 929893-85
Recommended Use and Restrictions on Use: Concrete form release agent

COMPANY IDENTIFICATION

Supplier: **CEMENTAID (Vic) PTY. LTD.**
A.B.N. 18 004 518 889
15 Clarice Rd
Box Hill South Vic 3128 Australia

Product Technical Information +61 3 9890 0487
Supplier General Contact +61 3 9890 6223

Emergency Telephone **1800 638 556 (24hr)**

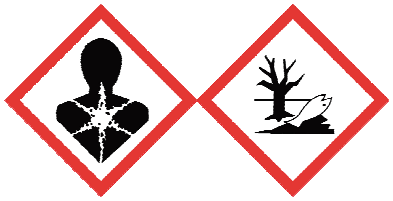
SECTION 2 HAZARDS IDENTIFICATION

GHS classification of the substance/mixture
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Aspiration Hazard: Category 1
Carcinogenicity: Category 2
Flammable Liquids: Category 4
Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2

Signal Word (s)
DANGER

Hazard Statement (s)
AUH066 Repeated exposure may cause skin dryness or cracking.
H227 Combustible liquid.
H304 May be fatal if swallowed and enters airways.
H351 Suspected of causing cancer.
H411 Toxic to aquatic life with long lasting effects.

Pictogram (s)
Health hazard,Environment



Precautionary statement – Prevention
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.

Precautionary statement – Response
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.
P370+P378 In case of fire: Use foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only for extinction.
P391 Collect spillage.

Precautionary statement – Storage
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Precautionary statement – Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Fuels, diesel	68334- 30- 5	>80 %
Fatty acids, vegetable oil, methyl esters	68990- 52- 3	<20 %

Preparation Description
Complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C9 to C25 range. May also contain several additives at <0.1% v/v each. May contain cetane improver (Ethyl Hexyl Nitrate) at <0.2% v/v. May contain catalytically cracked oils in which polycyclic aromatic compounds, mainly 3-ring but some 4- to 6-ring species are present.

SECTION 4 FIRST AID MEASURES

Inhalation
If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestin
Do NOT induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person
place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

Skin
Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated
clothing before reuse or discard. Seek medical attention.

Eye contact
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attentio .

First Aid Facilities
Eyewash and normal washroom facilities.

Advice to Doctor
Treat symptomatically.

Other Information
For advice in an emergency, contact a Poisons Information Centre or a doctor at once.
(131 126)

SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media
Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media
Do not use water in a jet.

Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide,
carbon dioxide, oxides of sulphur and oxides of nitrogen.

Specific Hazards Arising From The Chemical
This product will burn if exposed to fire.

Decomposition Temperature
Not available

Precautions in connection with Fire
Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective
clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

Other Information
Keep adjacent containers cool by spraying with water.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste
According to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling
Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Do not use near ignition sources.
Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene by washing hands prior to eating, drinking, smoking or using toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage.
Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area.
Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.
For information on the design of the storeroom, reference should be made to Australian Standard AS1940 –
The storage and handling of flammable and combustible liquids.

Storage Regulations
Classified as a Class C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940.

Recommended Materials
For containers, or container linings use mild steel, stainless steel. Aluminium may also be used for applications where it does not present an unnecessary fire hazard. Examples of suitable materials are: high density polyethylene

(HDPE) and Viton (FKM), which have been specifically tested for compatibility with this product. For container linings, use amine-adduct cured epoxy paint. For seals and gaskets use: graphite, PTFE, Viton A, Viton B.

Unsuitable Materials
Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Examples of materials to avoid are: natural rubber (NR), nitrile rubber (NBR), ethylene propylene rubber (EPDM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), polyisobutylene.; However, some may be suitable for glove materials.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limit values
No exposure standards have been established for the mixture. However, over-exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.

Biological Limit Values
No biological limits allocated.

Appropriate Engineering Controls
This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.
Refer to relevant regulations for further information concerning ventilation requirements.
Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1:2009 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Respiratory Protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.
Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection
Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.
Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection
Wear gloves of impervious material such as nitrile gloves (Breakthrough time of > 240 minutes), neoprene, PVC gloves. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.
Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Body Protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Other Information
No exposure standards have been established for this material, however, the TWA exposure standards for refined mineral oil mist is 5 mg/m^3. As with all chemicals, exposure should be kept to the lowest possible levels.
TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
Source: Safe Work Australia

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Form
Liquid

Appearance
Colourless to straw liquid.

Colour
Colourless to straw

Odour
May contain a reodorant

Decomposition Temperature
Not available

Melting Point
Not available

Freezing Point
Not available

Boiling Point
170 - 390 °C

Solubility in Water
Not available

Specific Gravity
0.82 - 0.85 gm/cm at 15°C

pH
Not available

Vapour Pressure
< 1 hPa at 20 °C

Vapour Density (Air=1)
Not available

Evaporation Rate
Not available

Odour Threshold
Not available

Viscosity
Not available

Partition Coefficient: n-octanol/water
3 - 6

Density
Typical 0.84 g/cm³ at 15 °C

Flash Point
Typical 63 °C (ASTM D-93 / PMCC)

Flammability
Combustible

Auto-Ignition Temperature
> 220 °C

Flammable Limits - Lower
1 %(V)

Flammable Limits - Upper
6 %(V)

Kinematic Viscosity
2 - 4.5 mm²/s at 40 °C

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions of storage and handling.

Reactivity and Stability
Reacts with incompatible materials.

Conditions to Avoid
Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials
Strong oxidising agents.

Hazardous Decomposition Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

Possibility of hazardous reactions
Not available

Hazardous Polymerization
Not available

SECTION 11 TOXICOLOGICAL INFORMATION

Toxicology Information
The available toxicity data for material given below.

Acute Toxicity - Oral
LD50:(Rat): >2000 mg/kg

Acute Toxicity - Inhalation
LD50:(Rat): >5 mg/l / 4 h

Acute Toxicity - Dermal
LD50:(Rabbit): >2000 mg/kg

Ingestion
May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation
Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

Skin
Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye
May be irritating to eyes. The symptoms may include redness, itching and tearing.

Respiratory sensitisation
Not expected to be a respiratory sensitiser.

Skin Sensitisation
Not expected to be a skin sensitiser.

Germ cell mutagenicity
Not considered to be a mutagenic hazard.

Carcinogenicity
Suspected of causing cancer. Classified as a suspected human carcinogen.

Reproductive Toxicity
Not considered to be toxic to reproduction.

STOT-single exposure
Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure
Not expected to cause toxicity to a specific target organ.

Aspiration Hazard
May be fatal if swallowed and enters airways.

Other Information
Repeated Dose Toxicity: Kidney: Caused kidney effects in male rats which are not considered relevant to humans.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity
Toxic to aquatic life with long lasting effects.

Persistence and degradability
Major constituents are expected to be inherently biodegradable. The volatile constituents will oxidize rapidly by photochemical reactions in air.

Mobility
Floats on water. Partly evaporates from water or soil surfaces, but a significant proportion will remain after one day. Large volumes may penetrate soil and could contaminate groundwater. Contains volatile constituents.

Bioaccumulative Potential
Contains constituents with the potential to bioaccumulate.

Other Adverse Effects
Films formed on water may affect oxygen transfer and damage organisms.

Environmental Protection
Do not discharge this material into waterways, drains and sewers.

Acute Toxicity - Other Organisms
LL/EL/IL50:(Aquatic organisms): 1-10 mg/l

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal considerations
Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

SECTION 14 TRANSPORT INFORMATION

Transport Information
Road and Rail Transport (ADG Code):
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
This product meet the requirement of special provision AU01.

Note: Special Provision AU01:
Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in:
packagings that do not incorporate a receptacle exceeding 500 kg(L); or
IBCs

This product is not classified as Dangerous Goods UN number 1202.

Note: Special Provision AU02:
GAS OIL or DIESEL OIL or HEATING OIL, LIGHT or PETROLEUM DISTILLATE is not subject to this Code if it does not meet the criteria of Chapter 2.3 for assignment to Class 3; i.e. if the flash point is more than 60 oC and the substance is not offered for transport at a temperature above its flash point. Such substances will normally be C1 combustible liquids which are not classified as dangerous goods for transport purposes. However, the presence of a C1 combustible liquid in one or more compartments of a tank vehicle or portable tank transporting other refined petroleum products must be considered when determining the application of UN Number 1270 in accordance with 3.2.5.4 and 5.3.1.3.3.

Marine Transport (IMO/IMDG):
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
Class/Division: 9
UN No: 3082
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(CONTAINS: FUEL, DIESEL)
(MARINE POLLUTANT)
Packing Group: III
EMS : F-A, S-F
Special Provisions: 274, 335, 969

Air Transport (ICAO/IATA):
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
Class/Division:
UN No: 3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains: Fuel, diesel)
Packing Group: III
Packaging Instructions (passenger & cargo): 964
Packaging Instructions (cargo only): 964
Hazard Label: Miscellaneous
Special Provisions: A97, A158, A197

U.N. Number
None Allocated

UN proper shipping name
None Allocated

Transport hazard class(es)
None Allocated

IMDG Marine pollutant
Yes

Transport in Bulk
Not available

Special Precautions for User
Not available

Other Information
This product is classified as Oils under MARPOL Annex I. MARPOL Annex I rules apply for bulk shipments by sea.

SECTION 15 REGULATORY INFORMATION

Regulatory information
Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia.

SUSMP Schedule: Not scheduled. When packed in containers having capacity of greater than 20 litres.
SUSMP Schedule: S5. When packed in containers having capacity of less than 20 litres.

Poisons Schedule
S5

SECTION 16 OTHER INFORMATION

Date of preparation or last revision of SDS
SDS Reviewed: October 2017
Supersedes: April 2015

References

- Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

- Standard for the Uniform Scheduling of Medicines and Poisons.

- Australian Code for the Transport of Dangerous Goods by Road & Rail.

- Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

- Workplace exposure standards for airborne contaminants, Safe work Australia.

- American Conference of Industrial Hygienists (ACGIH).

- Globally Harmonised System of classification and labelling of chemicals.

The information and recommendations contained herein are, to the best of Cementaid's knowledge and belief, accurate and reliable as of the date issued. The information and recommendations are offered for the user's consideration and examination.
It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container.
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DGN: 2000461XAU (1011103)

Prepared by: Cementaid (Australia Group)
Contact Point: See Section 1 for Local Contact number

End of (SDS)