



Generic Material Safety Data Sheet: NECT-90 Base with colorants
Preparation Date: November 29, 2005

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product identifier/Trade name: NECT-90 Base with colorants*
(*Titanium white; Red oxide; Yellow oxide; Green; Blue and Black)

Product code/Internal Identification: NECT-90 Titanium white; NECT-90 Red oxide; NECT-90 Yellow oxide;
NECT-90 Green; NECT-90 Blue and NECT-90 Black

Product use/Description: Acrylic Latex

Supplier identifier: Nawkaw Corporation
2283 Argentia Road #23 Mississauga, Ontario L5N 5Z2 (905) 542-7893

Manufacturer identifier: Same as supplier

Emergency phone number: (613) 996-6666 (CANUTEC)

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (weight)	ACGIH TLV	OSHA PEL
Calcium carbonate	1317-65-3	10-30	TLV-TWA 10 mg/m ³	PEL-TWA 15 mg/m ³ (total dust) PEL-TWA 5 mg/m ³ (respirable fraction)
Ethylene glycol	107-21-1	1-5	TLV-C 100 mg/m ³	PEL-C 50 ppm
Attapulgite	12174-11-7	1-5	N/Av	N/Av
Quartz silica	14808-60-7	< 0.1	TLV-TWA 0.05 mg/m ³	PEL-TWA 0.1 mg/m ³ (respirable dust)

Possible colorants (verify with product code/identifier on label)*

*Titanium white

Crystalline silica (Talc)	14807-96-6	0.1-1.0	TLV-TWA 0.05 mg/m ³	PEL-TWA 2 mg/m ³ (respirable dust)
Modified ethoxylate	Trade Secret HMIRC Registry No. 4513 Exemption Granted 11-18-02			

*Red oxide

Crystalline silica (Talc)	14807-96-6	0.1-1.0	TLV-TWA 0.05 mg/m ³	PEL-TWA 2 mg/m ³ (respirable dust)
Modified ethoxylate	Trade Secret HMIRC Registry No. 4532 Exemption Granted 11-18-02			

*Yellow oxide

Kaolin	1332-58-7	0.1-1.0	TLV-TWA 0.05 mg/m ³	PEL-TWA 10 mg/m ³ (total dust) PEL-TWA 5 mg/m ³ (respirable fraction)
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Alkyl sulfonate

Modified ethoxylate	Trade Secret HMIRC Registry No. 5164 Exemption Granted 07-25-01			
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*Green

Crystalline silica (Talc)	14807-96-6	1-5	TLV-TWA 0.05 mg/m ³	PEL-TWA 2 mg/m ³ (respirable dust)
Alkyl sulfonate	Trade Secret			
Modified ethoxylate	Trade Secret HMIRC Registry No. 4557 Exemption Granted 12-03-02			

*Blue

Crystalline silica (Talc)	14807-96-6	1-5	TLV-TWA 0.05 mg/m ³	PEL-TWA 2 mg/m ³ (respirable dust)
Diethylene glycol	111-46-6	0.1-1.0	N/Av	N/Av
Copper phthalocyanine	147-14-8	0.1-1.0	N/Av	N/Av
Modified ethoxylate	Trade Secret HMIRC Registry No. 6332 Exemption Granted 11-28-05			



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*Black

Crystalline silica (Talc)	14807-96-6	1-5	TLV-TWA 0.05 mg/m ³	PEL-TWA 2 mg/m ³ (respirable dust)
Quartz silica	14808-60-7	0.1-1.0	TLV-TWA 0.05 mg/m ³	PEL-TWA 0.1 mg/m ³ (respirable dust)
Kaolin	1332-58-7	0.1-1.0	TLV-TWA 0.05 mg/m ³	PEL-TWA 10 mg/m ³ (total dust) PEL-TWA 5 mg/m ³ (respirable fraction)
Carbon black	1333-86-4	0.1-1.0	TLV-TWA 3.5 mg/m ³	PEL-TWA 3.5 mg/m ³
Modified ethoxylate	Trade Secret HMIRC Registry No. 4564 Exemption Granted 09-21-99			

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview

Coloured liquid, solvent odour. CAUTION! May be harmful if absorbed through the skin or swallowed in large quantities. Extremely high vapour concentrations may cause vomiting, drowsiness and slight irritation of the nose and the throat. Repeated or excessive exposure may cause slight skin and eye irritations. Contains materials that may cause lungs and kidney damage. SUSPECT REPRODUCTIVE HAZARD – May cause embryotoxic and teratogenic effects. CANCER HAZARD – May cause carcinogenic effects.

POTENTIAL HEALTH EFFECTS (for more details, refer to Section 11)

Primary entry route(s): Skin, eye, ingestion and inhalation.

Target organs: Kidneys and brain; Lungs

Effects of short-term (acute) exposure:

Inhalation:

Extremely high vapour concentrations may cause vomiting, drowsiness and slight irritation of the nose and the throat.

Skin:

May be harmful if absorbed through the skin in large quantities. Repeated or excessive exposure may cause slight skin irritations.

Eye:

Repeated or excessive exposure may cause slight eye irritations.

Ingestion:

May be harmful if swallowed in large quantities. May cause gastrointestinal irritation, nausea, vomiting, and diarrhea.

Long-term (chronic) exposure: Repeated or excessive exposure may cause lung (silicosis), kidney and brain damage.

Conditions aggravated by exposure: Pre-existing lungs, kidneys and brain, skin and respiratory disorders.

Carcinogenic status: See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards: For further information, see TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects: See ECOLOGICAL INFORMATION, Section 12.

SECTION 4 - FIRST AID MEASURES

Inhalation:

Remove source of contamination or have victim move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention immediately.



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Skin contact:

Flush contaminated area with lukewarm, gently running water for at least 20 minutes or until the chemical is removed. Under running water, remove contaminated clothing. If irritation persists, obtain medical advice. Completely decontaminate clothing before reuse or discard.

Eye contact:

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes, or until the chemical is removed, while holding the eyelid(s) open. Obtain medical attention immediately

Ingestion:

NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Repeat administration of water. Obtain medical attention immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability: Does burn at temperature above the Flash Point.

Flammability classification (OSHA 29 CFR 1910.1200): Class IIIB Combustible Liquid

Flash point (Method): 116 °C (240.8 °F) (closed cup)

Lower flammable limit (% by volume): N/Av

Upper flammable limit (% by volume): N/Av

Explosion data - Sensitivity to mechanical impact: Not sensitive

Explosion data - Sensitivity to static discharge: Probably not sensitive

Auto-ignition temperature: N/Av

Oxidizing properties: N/Av

Suitable extinguishing media: Carbon dioxide, dry chemical powder and appropriate foam.

Special fire-fighting procedures/equipment:

During a fire, irritating/toxic smoke and fumes may be generated. Vapours can accumulate in confined spaces, resulting in a toxicity and flammability hazard. A self-contained breathing apparatus is required for fire-fighting personnel to protect themselves from toxic products produced during the combustion. Closed containers may explode with the pressure building from the heat. Use water to cool fire exposed containers and prevent this situation.

Hazardous combustion products:

Carbon monoxide, carbon dioxide and other irritant gases, which may include toxic constituents.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:

Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. Remove all ignition sources. Remove or isolate flammable and combustible materials. Wear adequate personal protective equipment (See Section 8). Ventilate area.

Spill response/Cleanup:

Stop the flow if it can be done safely. Keep materials which can burn away from spilled material. Prevent material from entering waterways, sewers or confined spaces. SMALL SPILLS: Soak up spill with absorbent material which does not react with spilled chemical. Put material in suitable, covered, labelled containers. DO NOT flush area with water or other aqueous agents. LARGE SPILLS: Contain spill with earth, sand, or absorbent material which does not react with spilled material.



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Remove liquid and place in suitable, covered, labelled containers. Contact fire and emergency services and supplier for advice. Contaminated absorbent material may pose the same hazards as the spilled product.

Environmental precautions:

For large spills, notify government occupational health and safety and environmental authorities. Confine spill, preventing it from entering sewer lines or waterways. Dispose of as per local, state and federal regulations.

Prohibited materials: N/Av

Special spill response procedures:

No special disposal method required, except that it be in accordance with current local, state/provincial and federal regulations.

SECTION 7 - HANDLING AND STORAGE

Safe handling procedures:

Before handling, it is very important that engineering controls are operating and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Do not use near welding operations, flames or hot surfaces. Ensure proper ventilation after sealed area has been treated. Avoid generating vapours or mists. Inspect containers for leaks before handling. Label containers appropriately. Keep containers closed when not in use. Assume that empty containers contain residues which are hazardous. Do not use with incompatible materials such as strong oxidizing agents.

Storage requirements:

Store in a cool, well-ventilated area, at temperatures below 49°C (120 °F), out of direct sunlight and away from heat and ignition sources. Keep storage area clear of ignition sources. Store away from incompatible materials such as strong oxidizers. Inspect all incoming containers to make sure they are properly labelled and not damaged. Store in suitable, labelled containers. Keep containers tightly closed. Empty containers may contain hazardous residues. Keep absorbents for leaks and spills readily available. Storage facilities should be made of fire resistant materials. For large-scale storage, use a grounded, non-sparking ventilation system, approved explosion-proof equipment and intrinsically safe electrical systems. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area.

Special packaging materials: N/Av

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls:

Mechanical ventilation system is recommended to maintain concentrations of contaminants below exposure limits.

Respiratory Protection:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable approved respiratory protection. Have appropriate equipment available for use in emergencies such as spills or fire. Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirator if the exposure limits are unknown.

Skin protection and other protective equipment:

Wear chemically protective gloves (impervious), boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area. Separate contaminated work clothes from street clothes. Launder before reuse. Seek advice from protective equipment supplier.

Eye / face protection:

Wear protective chemical safety glasses, goggles or a face shield.

General hygiene considerations:

Avoid contact with skin and eyes. Avoid breathing vapours or mists. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material.



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Permissible exposure levels: For individual ingredient exposure levels, see Section 2.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state, colour and odour: Coloured liquid with solvent odor. See also Section 1 and 2.

Odour threshold: N/Av

pH: N/Av

Boiling point: 100-244 °C (212-471.2 °F)

Melting/freezing point: N/Av

Vapour pressure: N/Av

Solubility in water: N/Av

Coefficient of oil/water distribution: N/Av

Specific gravity or density (water = 1, at 4 °C): 1.16

Vapour density: Heavier than Air

Evaporation rate: N/Av

% volatile by volume: N/Av (by weight 65.83 %)

Viscosity: N/Av

VOC (g/L): 119.7

SECTION 10 - REACTIVITY AND STABILITY DATA

Stability and reactivity: Stable at room temperature, in normal handling and storage conditions.

Polymerisation: Hazardous polymerisation will not occur.

Conditions to avoid: Avoid STRONG OXIDIZING AGENTS, STRONG ACIDS AND BASES, etc...

Materials to avoid: Avoid STRONG OXIDIZING AGENTS, STRONG ACIDS AND BASES, etc...

Hazardous decomposition products: None reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

Toxicological data: N/Av for the product.

Ingredient	LD ₅₀ (route, specie)	LC ₅₀ # hours (specie)
Calcium carbonate	6450 mg/kg (oral, rat)	N/Av
Ethylene glycol	4700 mg/kg (oral, rat)	N/Av
Attapulgite	N/Av	N/Av
Quartz silica	N/Av	N/Av
Crystalline silica (Talc) *Red oxide, Green, Blue, Black	N/Av	N/Av
Kaolin *Yellow oxide, Black	N/Av	N/Av
Diethylene glycol *Blue	N/Av	N/Av
Copper phthalocyanine *Blue	N/Av	N/Av
Carbon black *Black	N/Av	N/Av

For more details, refer to Section 3.

Carcinogenicity: Attapulgite and Quartz silica (Carbon black *Black) are listed by IARC, ACGIH, NTP and OSHA as possible carcinogen.

Teratogenicity, mutagenicity, other reproductive effects: Ethylene glycol may cause embryotoxic and teratogenic effects.

Skin sensitization: N/Av



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Respiratory tract sensitization: N/Av
Synergistic materials: N/Av
Other important hazards: N/Av

SECTION 12 - ECOLOGICAL INFORMATION

Environmental effects: N/Av
Important environmental characteristics: N/Av
Aquatic toxicity: N/Av

SECTION 13 - WASTE DISPOSAL

Handling and storage conditions for disposal: Store material for disposal as indicated in Handling and Storage (Section 7).
Methods of disposal: Review federal, provincial and local government requirements prior to disposal. Disposal by controlled incineration or secure landfill may be acceptable.
RCRA: If this product, as supplied, becomes a waste, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 - TRANSPORTATION INFORMATION

Transportation of Dangerous Goods (TDG) in Canada :

Proper shipping name: Not regulated
Class: N/Av
Identification number: N/Av
Packing group: N/Av
Special case: N/Av

49 CFR/DOT information in USA:

Proper shipping name: Not regulated
Class: N/Av
Identification number: N/Av
Packing group: N/Av
Special case: N/Av
Reportable quantity (RQ): Ethylene glycol = 5000 pounds (2270 kg)

SECTION 15 - REGULATORY INFORMATION

Hazardous Materials Identification System (HMIS):

HEALTH: 1* Chronic FLAMMABILITY: 1 REACTIVITY: 0 PERSONAL PROTECTION: Section 8.

HAZARD: 0 Minimal 1 Slight 2 Moderate 3 Serious 4 Severe

In Canada

WHMIS information:

Product is regulated according to the Controlled Product Regulation (CPR) in Canada. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.



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WHMIS Classification: D2A – Toxic Materials with other effects
CEPA information: Ingredients are listed on the DSL inventory.
In USA
TSCA information: Ingredients are listed on the TSCA inventory.

EPA / CERCLA (40 CFR 302.4) information:

The following chemicals, with established reportable quantities, are designated as hazardous substances

Chemical Name	CAS #	% (weight)	CERCLA Reportable Quantities (RQ's)
Calcium carbonate	1317-65-3	10-30	None
Ethylene glycol	107-21-1	1-5	5000 pounds (2270 kg)
Attapulgate	12174-11-7	1-5	None
Quartz silica	14808-60-7	< 0.1	None
Crystalline silica (Talc) *Red oxide, Green, Blue, Black	14807-96-6	Section 2	None
Kaolin *Yellow oxide, Black	1332-58-7	Section 2	None
Diethylene glycol *Blue	111-46-6	Section 2	None
Copper phthalocyanine *Blue	147-14-8	Section 2	None
Carbon black *Black	1333-86-4	Section 2	None

SARA TITLE III:

Verify if this material is subject to the TSCA notification requirements, as per *Sec. 313, Toxic Chemicals Notification, 40 CFR 372.*

California Proposition 65:

This product contains Attapulgate also known as Palygorskite fibers (CAS # 12174-11-7) and Crystalline silica (CAS # 14808-60-7), chemicals which are known to the State of California to cause cancer.

New Jersey Labeling Requirements: The following substances are required to be disclosed on product labelling

Chemical Name	CAS #	% (weight)	New Jersey Hazardous Substance
Calcium carbonate	1317-65-3	10-30	No
Ethylene glycol	107-21-1	1-5	Yes
Attapulgate	12174-11-7	1-5	No
Quartz silica	14808-60-7	< 0.1	Yes
Crystalline silica (Talc) *Red oxide, Green, Blue, Black	14807-96-6	Section 2	Yes
Kaolin *Yellow oxide, Black	1332-58-7	Section 2	No
Diethylene glycol *Blue	111-46-6	Section 2	No
Copper phthalocyanine *Blue	147-14-8	Section 2	No
Carbon black *Black	1333-86-4	Section 2	Yes

SECTION 16 - OTHER INFORMATION

Prepared by: ICC The Compliance Center Inc. for Nawkaw Corporation
Telephone number: (514) 636-8146 or (905) 542-7893

References:

1. Manufacturer'/suppliers' MSDS.
2. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2005.
3. International Agency for Research on Cancer Monographs, 2004.
4. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2005 (Chempendium, HSDB, RTECs and New Jersey Hazardous Substance Fact Sheets).



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5. US EPA Title III List of Lists – October 2001 version.
6. California Proposition 65 List – December 2, 2005 version.

Abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
C	Ceiling
CAS	Chemical Abstract Service
CEPA	Canadian Environmental Protection Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	Code of Federal Regulations (Transportation in U.S.A.)
DOT	Department of Transport (U.S.A.)
DSL	Domestic Substance List
EPA	United States Environmental Protection Agency
EST	Eastern Standard Time
HSDB	Hazardous Substance Data Bank
IARC	International Agency for Research on Cancer
LC	Lethal concentration
LD	Lethal Dosage
N/Av	Not Available
N/Ap	Not Applicable
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments & Reauthorization Act
STEL	Short-term Exposure Limit
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

End of the MSDS