

S-2 MATERIAL SAFETY DATA SHEET

CREATION DATE: JUNE 26, 1990
REVISION DATE: NOVEMBER 29, 2008

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(CANADIAN S-2 DIFFERS FROM S-2 SOLD BY DURO DYNE U.S.A.)

SECTION 01: S-2 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
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PRODUCT NUMBER: N36000A
IDH NUMBER: 1218005
PRODUCT NAME: NACAN ® 36-000A

MANUFACTURER:
Henkel Canada Corporation (Formerly Nacan Products Limited)
2225 Meadowpine Boulevard
Mississauga, Ontario L5N 7P2 Canada
Emergency Telephone Numbers:
MEDICAL: 866-359-5657 (Health & Safety Call Center-24 hours)
TRANSPORT: CHEMTREC: 800-424-9300 (24 hours)
CHEMTREC International: 703-527-3887 (call collect)
CUSTOMER SERVICE: 888-480-6885
CANUTEC: (613) 996-6666

SECTION 02: S-2 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

EYE IRRITANT.
SKIN IRRITANT.
FLAMMABLE.
RESPIRATORY SENSITIZER.
Red liquid Hydrocarbon @kerrcontrols.ca

EYE CONTACT: Irritating, but does not injure eye tissue.
SKIN CONTACT: Irritating to the skin. Repeated contact may cause skin dryness, cracking and dermatitis.
INHALATION: The vapor has anaesthetic properties and when inhaled at concentrations above the occupational exposure limit, it may cause respiratory irritation, headache, fatigue, dizziness and incoordination.
INGESTION: Ingestion may cause irritation of the gastrointestinal tract.

SECTION 03: S-2 COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL FAMILY: Synthetic Polymer / Organic Solvent Blend

Component	CAS Number	Concentration (weight %)
Acetone	67-64-1	30 - 60%
Methyl Ethyl Ketone	78-93-3	10 - 30%
Hexamethylene Tetramine	100-97-0	0.1 – 1.0%

SECTION 04: S-2 FIRST-AID MEASURES

EYE CONTACT: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention. Do not wear contact lenses when working with this material.

SKIN CONTACT: Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. If Irritation persists, obtain medical attention.

INHALATION: Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.

INGESTION: DO NOT induce vomiting. If individual is conscious, give milk or water to dilute stomach contents. Keep warm and quiet. Get prompt medical attention. DO NOT attempt to give anything by mouth to an unconscious person.

SECTION 05: S-2 FIREFIGHTING MEASURES

AUTOIGNITION: Not available

FLASH POINT: -18 °C (Tagliabue Closed Tester)

EXTINGUISHING MEDIA: CO₂; Dry Chemical; Foam

SPECIAL FIREFIGHTING PROCEDURES: Fire fighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.; Cool exposed equipment with water spray.

FIRE AND EXPLOSION HAZARDS: Prohibit smoking and open flames. Avoid sparks or other sources of static electricity. The vapor is heavier than air and may travel a considerable distance to a source of ignition and flashback. Cool containers exposed to fire with water.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide and unknown hydrocarbons..

LOWER EXPLOSION LIMIT (%): 1.8

UPPER EXPLOSION LIMIT (%): 12.8

SECTION 06: S-2 ACCIDENTAL RELEASE MEASURES:

SPILL AND LEAK PROCEDURES: Shut off ignition sources. Stop leak if you can do it without risk. For small liquid spills, take up with sand or other absorbent material. For larger spills, dike far ahead of spill for later disposal. No smoking, flames or flares in hazard area! Keep unnecessary people away.

For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

SECTION 07: S-2 HANDLING AND STORAGE

STORAGE TEMPERATURE: Ambient

HANDLING/STORAGE: Store in a cool, dry area away from heat, sparks or fire. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Pumping fluids can generate static electricity as a result of the contact between the moving fluid and inner pump surfaces. These charges can then build up on the exterior of the pump creating a spark hazard unless they are dissipated through a correctly installed grounding wire. Ground wires should be attached to water pipes or other metal building ground contacts.

SENSITIVITY TO STATIC ELECTRICITY: Yes

SENSITIVITY TO MECHANICAL IMPACT: No

SECTION 08: S-2 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits
Acetone	750 ppm STEL 500 ppm TWA
Methyl Ethyl Ketone	300 ppm STEL 200 ppm TWA
Hexamethylene tetramine	(ACGIH-TWA): 10 mg/m ³

VENTILATION: Local. Explosion-proof exhaust ventilation.

EYE PROTECTION: Safety glasses, goggles or face shield to protect against splashing. Eye washing equipment must be provided at handling points.

GLOVES: Rubber gloves are recommended.

CLOTHING: Uniforms, coveralls, or lab coat should be worn.

CHANGE/REMOVAL OF CLOTHING: Remove contaminated clothing and launder before reuse.

WASH REQUIREMENTS: Wash before eating, drinking, or using washroom facilities.

RESPIRATOR: Avoid prolonged or repeated breathing of vapor or mists. If exposure may or does exceed occupational exposure limits, use a NIOSH approved respirator to prevent overexposure.

SECTION 09: S-2 PHYSICAL AND CHEMICAL PROPERTIES

PURE SUBSTANCE OR MIXTURE: Mixture

PHYSICAL FORM: Liquid

COLOUR: Red

ODOUR: Hydrocarbon

ODOR THRESHOLD: Not available

OXIDIZING PROPERTIES: Not applicable

BOILING POINT: 56 °C

SOLUBILITY IN WATER: Slightly soluble

PARTITION COEFFICIENT

(n-octanol/water): Not available

SPECIFIC GRAVITY (WATER=1): 0.97

EVAPORATION RATE: Not available

SECTION 09: S-2 PHYSICAL AND CHEMICAL PROPERTIES-CONTINUED

VAPOR PRESSURE: Not available
 VAPOR DENSITY (Air=1): 2.0
 VOLATILES (%): 58
 VOLATILE ORGANIC COMPOUNDS: 539 g/liter
 AUTOIGNITION: Not available
 FLASH POINT: -18 °C (Tagliabue Closed Tester)

SECTION 10: S-2 STABILITY AND REACTIVITY

STABILITY: Stable
 HAZARDOUS DECOMPOSITION PRODUCTS: Stable under normal temperature and pressure.
 MATERIALS TO AVOID: Do not store with strong alkalies or alkali metals.

SECTION 11: S-2 TOXICOLOGICAL INFORMATION
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ROUTE OF ENTRY: Inhalation; Ingestion; Skin Contact; Eye Contact

CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

EFFECTS OF CHRONIC EXPOSURE: The toxicological properties of this product have not been fully evaluated. Use of good industrial hygiene practices is required. Avoid direct contact with skin or eyes. Do not ingest or inhale.

Exposure and / or contact with this product may cause reproductive or fetotoxic effects.

TARGET ORGANS: Liver; Kidneys; Central nervous system; Peripheral nervous system; Skin

RESPIRATORY SENSITIZATION: Sensitizer. May cause allergic reaction.

CARCINOGEN: No

NOTES ON ORAL TOXICITY

ACETONE:	Oral LD50: Mouse 5.8 g/kg Oral LD50: Mouse 3 g/kg	Low oral toxicity. Ingestion may cause irritation of the gastrointestinal tract. May cause nausea, vomiting and diarrhea. Aspiration of the product into the lungs following ingestion may cause pulmonary injury leading to pneumonitis.
METHYL ETHYL KETONE	Oral LD50: Rat 2900 mg/kg Oral LD50: Rat 3400 mg/kg	Low oral toxicity. Aspiration of the product into the lungs following ingestion may cause pulmonary injury leading to pneumonitis.
HEXAMETHYLENE TETRAMINE	Oral LD50: Mouse 200 – 512 mg/kg	May cause nausea, vomiting and diarrhea. Moderately toxic.

SECTION 11: S-2 TOXICOLOGICAL INFORMATION - CONTINUED
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NOTES ON DERMAL TOXICITY

ACETONE:	Dermal LD50: Rabbit 20 g/kg	Slightly irritating but does not injure eye tissue. Repeated or prolonged skin contact may result in moderate irritation. Repeated or prolonged contact may cause defatting of the skin resulting in dryness, cracking and dermatitis. Can be rapidly absorbed through skin.
METHYL ETHYL KETONE	Dermal LD50: Rabbit > 8000 mg/kg	Irritating to the skin. Can be rapidly absorbed through skin.
HEXAMETHYLENE TETRAMINE		Irritating to the skin. Repeated and / or prolonged contact may cause skin sensitization.

NOTES ON INHALATION TOXICITY

ACETONE:	Inhalation LC50 (4hr): Rat 16000 ppm	May cause irritation to eyes and respiratory system. The vapor has anaesthetic properties and when inhaled at concentrations above the occupational exposure limit, it may cause respiratory irritation, headache, fatigue, dizziness and incoordination.
METHYL ETHYL KETONE	Inhalation LC50 (6.00hr): Rat >5000 ppm Inhalation LC50 (4.00hr): Rat 11700 ppm	Low order of toxicity. Vapor, if generated, can cause irritation of the eyes, nose and respiratory tract.
HEXAMETHYLENE TETRAMINE		Dust is irritant to the respiratory tract. Respiratory sensitizer.

NOTES ON EYE IRRITATION

ACETONE		Will cause eye irritation. May cause permanent damage if eye is not immediately irrigated. The vapour and the liquid may cause burning, intense irritation and excessive watering of the eye.
METHYL ETHYL KETONE		Severe/very severe irritant
HEXAMETHYLENE TETRAMINE		Will cause eye irritation.

SECTION 12: S-2 ECOLOGICAL INFORMATION

POTENTIAL TO BIOACCUMULATE: Not available

AQUATIC TOXICITY: Not available

SECTION 13: S-2 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Use government approved waste disposal service.

EMPTY CONTAINER WARNINGS: Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.

SECTION 14: S-2 TRANSPORTATION INFORMATION

TDG INFORMATION

T.D.G. CLASS

SHIPPING NAME: Adhesives

U.N. NUMBER: 1133

CLASS: 3

PACKING GROUP: II

SECTION 15: S-2 REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations

WHMIS CLASS:

B2 D2A D2B

Canadian Domestic Substance List (DSL): On Inventory

SECTION 16: S-2 OTHER INFORMATION

RECOMMENDED USE:	Construction Adhesive
MSDS DATE:	November 29, 2008
SECTIONS MODIFIED SINCE PREVIOUS ISSUE:	1; 2; 3; 5; 7; 8; 9; 11; 15; 16
PREPARED BY:	Regulatory Affairs

S-2 ADDITIONAL INFORMATION

**** The information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guarantee of accuracy is made. It is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes. ****

S-2 TECHNICAL CONTACT

M.S.D.S. Co-ordinator

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