

## Material Safety Data Sheet

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### SECTION I CHEMICAL and COMPANY IDENTIFICATION

PRODUCT: **HB** *DHIN*  
CHEMICAL NAME: *1,2 - cyclohexane Dicarboxylic acid, Diisononyl ester branched and linear*  
COMMON/GENERIC NAME: **DINCH**  
CHEMICAL FAMILY: *aromatic esters formula: C<sub>26</sub>H<sub>48</sub>O<sub>4</sub>*  
MANUFACTURER: **HB CHEMICAL CORP** Customer Service- 330-920-8023  
**EMERGENCY NUMBERS:** *CHEMTREC 800-424-9300*  
*CANUTEC (Canada) 613-996-6666*

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### SECTION II COMPOSITION / INGREDIENT INFORMATION

COMPOSITION: *1,2 - cyclohexane Dicarboxylic acid, Diisononyl 99.5*  
C.A.S.#474919-59-0

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### SECTION III/IV HAZARDS / FIRST AID PROCEDURES

**EMERGENCY OVERVIEW:** A clear colorless, oily liquid, that is not normally irritating to eyes and skin. However, at processing temperatures, the product can emit fumes and vapors, which may cause irritation of the eyes and respiratory tract. Ingestion and prolonged contact should be avoided.

**EYE:** Flush eyes with water for 15 min. Call a physician if irritation develops.

**SKIN:** Wash skin with soap and water. If in contact with hot product, treat as a burn.

**INGESTION:** Do not induce vomiting. Never give anything by mouth to unconscious person. Seek medical attention.

**INHALATION:** Remove to fresh air; give artificial respiration or oxygen if necessary.

**TOXICITY:** No significant adverse effects expected. Not considered toxic/hazardous.

**CARCINOGENICITY:** Not listed by NTP, IARC or OSHA

**IN ALL CASES OF EMERGENCY, CONTACT A PHYSICIAN**

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### SECTION V FIRE AND EXPLOSION INFORMATION

FLASH POINT 224 C (DIN/ISO 2592) Auto Ignition Temp - >450C

**FIRE-FIGHTING PROCEDURES:** Use Chemical foam, CO<sub>2</sub>, Dry Chemical or water fog as extinguishing media. Treat as burning oil. Keep drums as cool as possible to avoid expansion, explosions, and splattering.

**HAZARDOUS COMBUSTION PRODUCTS:** This product will decompose under extreme temperatures forming oxides of carbon.

**PROTECTIVE EQUIPMENT:** Full eye protection and protective clothing are required for all indoor/outdoor fires and spills.

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## SECTION VI

### SPILLS AND ENVIRONMENTAL INFORMATION

**SPILL OR LEAK PRECAUTIONS:** Wear appropriate protective clothing, gloves and equipment. Contain spill with inert absorbent or earth. Transfer to secure containers, dispose of according to local, and state regulations. Thought should always be given to collecting the material in such a manner that it could be recycled. Clean/scrub affected area with detergent. Prevent run-off into sewers or natural waterways. Spills in excess of the RQ must be reported to the local emergency response organizations. Major spills should also be reported to the National Response Center. Spills with potential to contaminate coastal waterways must be reported to the U.S. Coast Guard (800-424-8802)

**WASTE DISPOSAL:** All containers should be effectively labeled to facilitate the appropriate disposal or reclaim.

## SECTION VII

### HANDLING AND STORAGE

Store in sealed containers in dry, ambient temperature conditions. Perform drum and tote filling in well-ventilated area wearing protective eye shields and clothing.

## SECTION VIII

### EXPOSURE CONTROLS AND PERSONAL PROTECTION

**VENTILATION:** Use only where sufficient ventilation exists to keep exposure levels of fumes and dust below recommended levels.

**RESPIRATORY AND PERSONAL PROTECTION:** Respirators should be selected when TWA exceeded. Avoid hot vapors when mixing or packaging. Safety glasses with side shields; gloves, boots and apron as appropriate.

**FACILITIES:** There should be a shower facility and eyewash in the building where this product is being stored and handled. Exercise good chemical handling practice.

## SECTION IX

### PHYSICAL AND CHEMICAL INFORMATION

Appearance: Clear, oily liquid  
Specific Gravity @25°C = 0.95  
Vapor Pressure: NA  
Viscosity cPs (25°C) = NA

Evaporation Rate: < 1 (butyl acetate=1)  
Boiling Point: 240°C  
Refractive Index 25°C: Not Established  
Solubility in Water: <0.02 mg/l

## SECTION X

### STABILITY AND REACTIVITY

Under normal storage conditions, this product a) is stable; b) will not polymerize or exotherm; c) should be kept away from extreme heat, strong oxidizers and bases; d) this product decomposes under high temperature and hydrolyses in humid conditions.

## SECTION XI

### TOXICOLOGICAL INFORMATION

Acute Toxicity    Oral – LD50/Rat:    >5000mg/kg  
                          Dermal – LD50/Rat:    > 2,000 mg/kg

Comments: Skin irritation (rabbit) – Non-irritant  
                  Eye irritation (rabbit) – Non-irritant  
                  Sensitization (rabbit) – Non-irritant

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Generic Toxicity – No mutagenic effects observed in studies with mammals or microorganisms  
Carcinogenicity – No carcinogenic effects observed in studies with mammals  
Reproductive toxicity – no reproductive impairment noted  
Development toxicity/teratogenicity – no development impairment/teratogenic effect noted

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## SECTION XII ECOLOGICAL INFORMATION

Basis for assessment: Information is based on producers (Nanya) own tests and knowledge of the components and toxicology of similar products

Environmental Fate and Mobility:

- 1) Biodegradability: Readily biodegradable according to OECD Criteria
- 2) Bioaccumulation: No bioaccumulation expected in organisms according to OECD testing Criteria

Environmental Fate and Mobility (Producers own tests)

Acute toxicity to fish: LC50: > 100mg/l  
Acute toxicity to aquatic invertebrates: EC50 (48hrs): >100mg/l  
Acute toxicity to aquatic plants: EC50 (72hrs): > 100mg/l  
Acute toxicity to microorganisms: EC20 (30min.): >1000mg/l  
Chronic toxicity to aquatic invertebrates: No observed effect at concentrations >0.021 mg/l  
Toxicity to soil dwelling organisms: LC50 (14D): >1000mg/l

**DO NOT RELEASE INTO NATURAL WATERS**

ENVIRONMENTAL DATA: No information available.

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## SECTION XIII DISPOSAL CONSIDERATIONS

Incineration by a permitted hazardous waste facility in accordance with all regulatory requirements is the preferred method of disposal. Empty containers can be rinsed with a suitable solvent/surfactant and steamed to remove residual product and fumes before disposal or reuse in accordance with applicable regulations. For spill clean-up procedures see Sect.VI.

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## SECTION XIV TRANSPORTATION INFORMATION

**DOT:** Not restricted. Label: Product trade name with chemical description.  
**CANADA TRANSPORT HAZ.GOODS:** Not restricted.  
**AIR (IATA/ICAO):** Not restricted. Label: Product trade name with chemical description.  
**EUROPEAN TRANSPORTATION:** ADR/RID HAZ. CLASS: Not regulated.  
**US CUSTOMS:** - HARMONIZED TARIFF CODE: 2917.33.00.50

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## SECTION XV REGULATORY INFORMATION

**OSHA:** Not Listed  
**SARA TITLE III:** - 311/312 CATEGORIES: Not listed.  
“ “ - 313 Reportable ingredients: None

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**CERCLA RQ:** Not applicable.

**RCRA Status:** Not known

**TSCA REGULATORY:** All intentional ingredients are listed in the TSCA Inventory.

**CANADA WHMIS HAZARD SYMBOL AND CLASS:** Not Regulated

**CANADA INGREDIENT DISCLOSURE LIST:** Does not contain any ingredients on the IDL. All intentional ingredients are on the DSL.

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## SECTION XVI OTHER INFORMATION

HMIS Label:    Health: 1  
                  Fire: 1  
                  Reactivity: 0  
                  Protection: B

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Prepared: January, 2009

The information presented herein was taken from the INNUA Canada MSDS 18 Nov. 2008, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other or additional considerations.

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