

MATERIAL SAFETY DATA SHEET

Nature Clean- Frank T Ross Ltd

Dishwashing Liquid
Mandarin / Grapefruit

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Hand Dishwashing Detergent – Mandarin & Grapefruit

PRODUCT USE: Dish Cleaner

MANUFACTURER: Frank T Ross and Sons Ltd

SUPPLIER: Frank T Ross and Sons

ADDRESS: 70 Esna Park Drive, Unit 14
Markham
Ontario L3R 6E7

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EMERGENCY: 905 940 1107

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SECTION II: INFORMATION ON INGREDIENTS

| Ingredients | CAS# | Wt% | OSHA-PEL | ACGIH-TLV | LD ₅₀ |
|---------------------------|---------------------------|-------|----------------|----------------|-----------------------------|
| Decyl Glycoside | 6851-57-31 11061-54-79 | 1-5 % | Not applicable | Not applicable | > 5,000 mg/Kg (Oral/Rat) |
| Cocoamidopropyl Betaine | 61789-40-0 | 1-5 % | Not applicable | Not applicable | > 4900 mg/Kg (Oral/Rat) |
| Coco Dimethyl Amine Oxide | 61788-90-7 | 1-5 % | Not applicable | Not applicable | > 2,700 mg/Kg (oral/Rat) |

All active ingredients in this product are derived from readily biodegradable, renewable, sustainable, botanical, resources. This product is EcoLogo certified by Environment Canada's Environmental Choice Program CCD-146K -Dish Cleaners

SECTION III: HAZARDOUS IDENTIFICATION

Route of Entry: Eye, skin contact, ingestion.

Potential Health Effects:

Eye Contact: May cause irritation to eyes

Skin Contact: May cause irritation upon repeated/prolonged contact.

Inhalation: May cause nose, throat and respiratory tract irritation

Ingestion: May cause irritation to mouth, esophagus and stomach. May cause gastric tract disorder and/or damage.

Chronic Effects

Carcinogenicity: No ingredients listed IARC or NTP or ACGIH. Non-hazardous by WHIMIS/OSHA criteria.

Teratogenicity, Mutagenicity,

Reproductive Effects: The ingredients in this product were found not to be mutagenic when tested by the Ames Assay, (OECD Guidelines for chemical testing, sec.471)

Skin: Repeated or prolonged exposures to dilutions can cause drying, de-fatting and dermatitis.

SECTION IV: FIRST AID MEASURES

Eye Contact: Immediately flush with water for 15 minutes. Holding eyelids open during flushing. If irritation persists, repeat flushing and obtain medical attention immediately.

Skin Contact: Flush with water for 15 minutes. Seek medical attention if irritation persists. Remove contaminated clothing and launder before reuse.

Inhalation: Move victim to fresh air.

Ingestion: DO NOT INDUCE VOMITING. Rinse mouth with water, then drink one glass of water. Seek medical attention. Do not give anything to victim if unconscious or convulsing.

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SECTION V: FIRE FIGHTING MEASURES

Flammability: Non flammable
Flash Point deg C, (TCC): >95°C

Means of Extinction: As appropriate for surrounding fire. Use water, dry chemical, carbon dioxide or foam
Special Fire Hazards: Fire fighters should wear self-contained breathing apparatus as for surrounding fire.
Auto-ignition temperature: Not applicable.
Flame propagation or burning rate of solid: Not applicable.
Sensitivity to static discharge: Not applicable
Unusual Fire and Explosion Hazards. None expected. As per surrounding fire.
Hazardous decomposition products: Oxides of carbon, oxides of nitrogen.

SECTION VI: ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures: Before attempting clean up, refer to the hazard data provided above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered container. For large quantities, dispose of in accordance with local, provincial/ state or federal regulations.
For large spills prevent from entering sewers and waterways. For large spills provide diking to prevent spreading.

SECTION VII: HANDLING AND STORAGE

Storage Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container away from incompatible materials, which include acids, oxidizing materials, reducing sugars and Ammonia Salts.
Storage temperature C Ambient to 45 C (must be stored above 8 C at all times)
Transport temperature C Ambient to 50 C (must be stored above 8 C at all times.)
Keep container closed. Handle and open container with care. Store in a well ventilated place away from incompatible materials. Do not store near open flame.
Do not reuse empty containers.

SECTION VIII: EXPOSURE CONTROL/PERSONAL PROTECTION

Gloves: Not normally required
Eye Protection: Not normally required
Respiratory Protection: Not normally required if good ventilation is maintained
Other Protective Equipment: As required by employer code. Eye bath, safety shower, protective clothing.
Engineering Controls: General ventilation normally required

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

| | | | | | |
|------------------------------|--|---|----------------------------|------------------------------------|----------|
| Boiling Point (deg C) | 100 | Specific Gravity (H₂O = 1): | 1.02-1.1 | Evaporation Rate (water=1): | Similar |
| % Volatile (Wt%): | > 80 % | Solubility in water: | Complete | PH (as supplied): | 8.0-10.0 |
| Physical State: | Liquid | Viscosity: | 700-900 cps RVF#4/20rpm | | |
| Appearance / Odour: | Transparent clear liquid with citrus odour | | | | |

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SECTION X: STABILITY AND REACTIVITY

Conditions for Chemical Instability: Stable
Incompatible Materials: Strong oxidizing agents, strong acids.
Hazardous Decomposition Products: Oxides of carbon, Oxides of Nitrogen

SECTION XI: TOXICOLOGICAL INFORMATION

Ingestion: Calculated basis >7,000 mg/ Kg Oral Rat

SECTION XII: ECOLOGICAL INFORMATION

Biodegradability: Surfactants are biodegradable as per Ready Biodegradability Closed bottle test (OECD 301 D, also known as the US EPA as OPPTS 835.3100 (Fate, Transport and Transformation Test Guidelines.)

96 hour LC0 > 1,000 mg/L (rainbow trout), 48 hour LC50 > 1,000 ml/L (ceriodaphnia dubia),

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SECTION XIII: DISPOSAL CONSIDERATIONS

Dispose of in accordance to all local, provincial/state and federal regulations.

SECTION XIV: TRANSPORTATION

T.D.G. Classification: Not regulated
D.O.T. Classification: Not regulated

SECTION XV: REGULATORY INFORMATION

Occupational Health and Safety Regulations:
WHMIS Class: Class D Division 2B
OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29.1920.1200) and Canadian WHMIS regulations

Environmental Regulatory Lists:
SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 None of these ingredients are listed.
CERCLA – Section 102 (Reportable Quantity) 40 CFR 302 None of the ingredients are listed
RCRA 40 CFR 261 (Subpart D) None of the ingredients are listed
CLEAN WATER ACT – Section 311 (Reportable None of these ingredients are listed

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Qty) 40 CFR 116:

CLEAN AIR ACT – Section 312 (List of
Hazardous Pollutants) 40 CFR 63 (Subpart C)

National Pollutant Release Inventory

Toxic Substances Control Act (TSCA)

Canadian Domestic Substance List (DSL):

None of these ingredients are listed

None of these ingredients are listed

All ingredients are registered on the Chemical Substances Inventory.

All ingredients are registered on the DSL

SECTION XVI: OTHER INFORMATION

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|-------|-----------------|--------------|-----------------------------|------------|--------------|
| Date: | January 4, 2010 | Prepared By: | Technical Services Group | Telephone: | 905 940 1107 |
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Disclaimer:

Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond the control of supplier, it is assumed that users of this material; have been fully trained according to the mandatory requirements of WHMIS. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries for consequential damages, which may result from the use or reliance on any information contained in this form. If user requires independent information on ingredients in this or other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400) or CSST on Montreal, Quebec (514-873-3990).