MATERIAL SAFETY DATA SHEET

JemPak GK Inc

Kirkland Automatic Dishwasher Powder in Water Soluble Pac

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:

Kirkland Automatic Dishwasher Powder in Water Soluble Pac PRODUCT USE:

leaner

SUPPLIER;

Jempak GK Inc.

ADDRESS:

80 Doney Crescent

Concord ON

L4K 3P1

EMERGENCY:

905 738 5656

SECTION II: INGREDIENT INFORMATION

| Ingredients | CAS# | Wt% | OSHA-TWA | ACGIH-TWA | LD ₅₀ |
|---------------------------------|------------|---------|-----------------|-----------------|--------------------------------|
| Polyacrylic acid Sodium Salt | 66019-18-9 | 1-5 | Not Established | Not Established | 2,000 mg/kg (Oral/Rat) |
| Sodium Silicate | 1344-09-8 | 3 - 7 | Not Established | Not Established | 1,500-3,200 g/kg (Oral/Rat) |
| Sodium Percarbonate | 15630-89-4 | 6 - 12 | Not Established | Not Established | 1,000 mg/kg 9Oral/Rat) |
| Sodium Carbonate | 497-19-8 | 20 - 40 | Not Established | Not Established | 1,900 mg/kg (oral/ Rat) |

SECTION III: HAZARDOUS IDENTIFICATION

Route of Entry:

Potential Health Effects:

Eye, skin contact, ingestion.

Eye Contact:

May cause irritation to eyes

Skin Contact: Inhalation: May cause irritation upon repeated/ prolonged contact. 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 ACGIC. 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, defatting 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. Seek medical attention if irritation persists. Remove contaminated clothing and

launder before reuse.

Inhalation:

Move victim to fresh air. If conscious, have victim take deep, slow breaths. Seek medical attention

if symptoms persist.

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.

SECTION V: FIRE FIGHTING MEASURES

Flammability:

Non flammable.

Flash Point deg (C,TCC) :

Not Applicable

Means of Extinction: Special Fire Hazards: As appropriate for surrounding fire. Use water, dry chemical, carbon dioxide or foam Fire fighters should wear self contained breathing apparatus as for surrounding fire.

Autoignition

Not applicable.

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temperature:

Flame propagation or

Not applicable.

burning rate of solid: Sensitivity to static

Not applicable

discharge:

Unusual Fire and

None expected. As per surrounding fire.

Explosion Hazards. Hazardous

Oxides of carbon, oxides of nitrogen.

decomposition products:

SECTION VI: ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures:

Before attempting clean up, refer to the hazard date provided above. Small spills may be absorbed with non reactive absorbent and placed is suitable, covered, labeled 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 As required by employer code. Eye bath, safety shower, protective clothing.

Other Protective Equipment:

General ventilation normally required

Engineering Controls:

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

| Boiling Point (deg C) | Not App | Bulk density (H ₂ 0 = 1): | 1.05 | Evaporation Rate (water=1): | Not App | |
|---------------------------|-----------|--------------------------------------|----------|-----------------------------|------------|--|
| % Volatile (Wt%): | 12.5 % | Solubility in water: | Complete | pH (10 %)solution: | 10.0 –11.5 | |
| Physical State: | powder | Viscosity: | Not App | | | |
| Appearance / Odour: | White por | wder with blue granules. | | | | |

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 when heated.

SECTION XI: TOXICOLOGICAL INFORMATION

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See Section II for LD 50 for individual components.

SECTION XII: ECOLOGICAL INFORMATION

Biodegradability:

Surfactants and citrate 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.)

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 Not regulated

D.O.T. Classification:

SECTION XV: REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Class:

OSHA & WHMIS:

Class D Division 2B

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

CERCLA - Section 102 (Reportable Quantity)

40 CFR 302

RCRA 40 CFR 261 (Subpart D) CLEAN WATER ACT - Section 311 (

Reportable 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 the ingredients are listed

None of the ingredients are listed None of these ingredients are listed

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

| Date: | Sept 10, 2012 | Prepared By: | Technical Services | Telephone: | 905 738 5656 ext 5192 |
|-------|---------------|--------------|--------------------|------------|-----------------------|
| 1 | | 5 559 | Group | | |

Disclaimer:

Information for this material safety data sheet was obtained from sources considered tehnically 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).