



G.K. Chemical Specialties Co. Ltd.
90 Barbados Blvd.
Scarborough, Ontario M1J 1K9
Tel: (416) 261-7182 Fax: (416) 261-5663

Material SAFETY DATA SHEET

PRODUCT NAME: Dish Glo Powdered Dishwashing Detergent

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| HEALTH HAZARD RATING: | SERIOUS HAZARD - major injury likely unless prompt action is taken and medical treatment is given |
| FLAMMABILITY HAZARD RATING: | MINIMAL HAZARD – materials which are normally stable and will not burn unless heated |
| REACTIVITY HAZARD RATING: | SLIGHT HAZARD – materials which are normally stable, but can become unstable at high temperatures and pressures. These materials may react with water, but will not release energy violently |
| PERSONAL PROTECTION: | Safety glasses + Gloves + Dust Respirator |
| HAZARD ALERT SIGN: | HEALTH HAZARD – Extreme danger FIRE HAZARD – Will not burn REACTIVITY – Unstable if heated SPECIFIC HAZARD – Corrosive |

SECTION I – MATERIAL IDENTIFICATION AND USE / IDENTIFICATION DE LA MATIÈRE ET USAGE

MATERIAL NAME / IDENTIFIÉRIER – NOM / IDENTIFICATION DE LA MATIÈRE

Dishglo Powdered Dishwashing Detergent

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|---|--|
| MANUFACTURER'S NAME AND ADDRESS/ NOM DU FABRICANT – ADRESSE EMERGENCY PHONE NO. / N° DE TÉLÉPHONE D'URGENCE | G.K. Chemical Specialties Co. Ltd. 90 Barbados Blvd. Scarborough, Ontario M1J 1K9 (416) 261-7182 / 905 427-7605 |
| SUPPLIER'S NAME AND ADDRESS/ NOM DU FOURNISSEUR - ADRESSE EMERGENCY PHONE NO. / N° DE TELEPHONE DURGENCE | |
| CHEMICAL NAME / DÉNOMINATION CHIMIQUE | Not Applicable |
| CHEMICAL FAMILY / FAMILLE CHIMIQUE | Detergent |
| CHEMICAL FORMULA / FORMULE CHIMIQUE | Not Applicable |
| TRADE NAME AND SYNONYMS / APPELLATION COMMERCIALE ET SYNONYMES | Not Applicable |
| MOLECULAR WEIGHT / POIDS MOLÉCULAIRE | Not Applicable |
| MATERIAL USE / UTILISATION DE LA MATIÈRE | Cleaning / Dish Washing |

G.K. Chemical Specialties Co. Ltd. has compiled the information and recommendations contained in this Material Safety Data Sheet from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation.

G.K. Chemical Specialties Co. Ltd. extends no warranty and assumes no responsibility as to the accuracy of the content or sufficiency of the information and expressly disclaims all liability for reliance thereon. This MSDS provides guidelines for the safe handling of this product. It does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required. Individuals exposed to this product should read and understand this information and be provided pertinent training prior to working with this product.

G.K. Chemical Specialties Co. Ltd. assumes no responsibility for personal injury or property damage to vendors, users or third parties caused by the material. Such vendors or users assume all risks associated with the use of the material.

INGREDIENTS. This MSDS, under section of Ingredients, contains all ingredients listed under INGREDIENT DISCLOSURE LIST P.C. 1987-2719, 20/1/88 CANADA GAZETTE PART II VOL. 122, No 2 of HAZARDOUS PRODUCT ACT.

Percentage range of concentration of ingredients is expressed as percentage by weight of the total weight of the product. Ingredient List does not necessarily list all ingredients in the formulation and does not necessarily list all ingredient range of concentration, other than ingredients under the Disclosure List.

T.L.V. (units) or Threshold Limit Values refer to the limiting concentrations recommended by the Ministry of Labour. These values were adopted by the American Conference of Governmental Industrial Hygienists (A.C.G.I.H.). The figures refer to time-weighted average concentrations as P.P.M. (V/V) or mg/m³ for a normal working day or at any time for some materials.

“C.A.S REG. No.” means the identification number assigned to a chemical substance by the Chemical Abstracts Service Division of the American Chemical Society.

“LC 50” means the concentration of a substance in air that when administered by means of inhalation over a specified length of time in an animal assay, is expected to cause the death of 50 per cent of a defined animal population.

“LD 50” means the single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause death of 50 per cent of a defined animal population.

FLASH POINT. The minimum temperature at which a substance gives off flammable vapors which in contact with spark or flame will ignite.

SECTION II – HAZARDOUS INGREDIENTS OF MATERIAL / INGRÉDIENTS DANGEREUX DE LA MATIÈRE

| HAZARDOUS INGREDIENTS / INGRÉDIENTS DANGEREUX | APPROXIMATE CONCENTRATION % CONCENTRATION APROXIMATIVE % | C.A.S., N.A. OR U.N. NUMBERS / NUMERO CAS NA OU CNU | LD50 {SPECIFY SPECIES & ROUTE} DL50 {PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION} | LC 50 {SPECIFY SPECIES & ROUTE} CL50 {PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION} |
|--|---|--|--|---|
| Sodium metasilcate | 15 – 40 | 6834-92-0 | LD50, Oral, Rat = 1280 mg/kgm TLV 2 mg /m ³ . | |
| Sodium carbonate | 15-40 | 497-19-8 | | |
| Sodium hydroxide | 10-20 | 1310-73-2 | LD50, Oral, Rat 2800 mg/kgm | |
| Silica amorphous, fumed | < 1 | 7631-86-9 | LD50, Oral Rat 10% Sol'n = 500 mg/kgm TLV 2 mg/m ³ | |
| Sodium dodecylbenzene sulfonate | 1 – 5 | 1322-98-1 | TLV 10 mg/m ³ | |
| Sodium dichloro-isocyanurate dihydrate | 1 – 5 | 51580-86-0 | LD50, Oral Rat 500-5000 mg/kgm | |
| Sodium tripolyphosphate | 10 – 30 | 7758-29-4 | LD50, ORAL Rat 735 mg/kgm LC50 > 200 mg < Rat, 1 hour | |
| Other Non Hazardous ingredients | 3 - 7 | Non Hazardous | LD50 Oral, Rat, 6500 mg/kgm | |

SECTION III – PHYSICAL DATA FOR MATERIAL / CARACTÉRISTIQUES PHYSIQUES DE LA MATIÈRE

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|---|---------------------------------|
| PHYSICAL STATE / ÉTAT PHYSIQUE | Solid |
| ODOUR AND APPEARANCE / ODEUR ET APPARENCE | White powder – no odour |
| ODOUR THRESHOLD (P.P.M.) / SEUIL DE L'ODEUR (PPM) | Not Applicable |
| SPECIFIC GRAVITY / DENSITÉ RELATIVE | Not Applicable |
| VAPOUR PRESSURE [MM] / TENSION DE VAPEUR [MM] | Not Applicable |
| VAPOUR DENSITY [AIRE = 1] / DENSITÉ DE VAPEUR [AIR =1] | Not Applicable |
| EVAPORATION RATE / TAUX D'ÉVAPORATION | Not Applicable |
| BOILING POINT [°C] / POINT D'ÉBULLITION [°C] | Not Applicable |
| FREEZING POINT [°C] / POINT DE CONGÉLATION [°C] | Not Applicable |
| SOLUBILITY IN WATER [20°C] / SOLUBILITÉ DANS L'EAU [20°C] | 15 – 20% in water |
| % VOLATILE [BY VOLUME] / % VOLATILITÉ [PAR VOLUME] | Not Applicable |
| PH | 1% solution in water 13.2 ± 0.5 |
| COEFFICIENT OF WATER / OIL DISTRIBUTION / COEFFICIENT DE RÉPARTITION EAU / HUILE | Not Applicable |

SECTION IV – FIRE AND EXPLOSION HAZARD OF MATERIAL/RISQUES D'INCENDIE ET D'EXPLOSION DU MATÉRIEL

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| FLAMMABILITY / INFLAMMABILITÉ <input type="checkbox"/> YES / OUI <input checked="" type="checkbox"/> NO/NON IF YES, UNDER WHICH CONDITIONS? / SI OUI, DANS QUELLES CONDISIONS? | |
| MEANS OF EXTINCTION / MOYENS D'EXTINCTION | None Required |
| SPECIAL PROCEDURES / MARCHE A SUIVRE SPÉCIALE | None Required |
| FLASHPOINT [°C] AND METHOD / POINT D'ÉCLAIR [°C] ET MÉTHODE DE DÉTERMINATION | Not Applicable |
| UPPER EXPLOSION LIMIT [% BY VOLUME]/ SEUIL MAXIMAL D'INFLAMMABILITÉ [% PAR VOLUME] | Not Applicable |
| LOWER EXPLOSION LIMIT [% BY VOLUME]/ SEUIL MINIMAL D'INFLAMMABILITÉ [% PAR VOLUME] | Not Applicable |
| AUTOIGNITION TEMPERATURE [°C] / TEMPÉRATURE D'AUTO- INFLAMMATION [°C] | Not Applicable |
| HAZARDOUS COMBUSTION PRODUCTS / PRODUITS DE COMBUSTION DANGEREUX | None Known |

EXPLOSION DATA / DONNÉES SUR L'EXPLOSIBILITÉ

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| SENSITIVITY TO MECHANICAL IMPACT / SENSIBILITÉ AUX CHOCS | Not Applicable |
| SENSITIVITY TO STATIC DISCHARGE / SENSIBILITÉ AUX DÉCHARGES ÉLECTROSTATIQUES | Not Applicable |

SECTION V – REACTIVITY DATA / DONNÉES SUR LA RÉACTIVITÉ

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| CHEMICAL STABILITY / STABILITÉ CHIMIQUE <input checked="" type="checkbox"/> YES / OUI <input type="checkbox"/> NO/NON IF NO, UNDER WHICH CONDITIONS? / SI NON-, DANS QUELLES CONDISIONS? | |
| INCOMPATIBILITY TO OTHER SUBSTANCES / INCOMPATIBILITÉ AVEC D'AUTRES SUBSTANCES <input checked="" type="checkbox"/> YES / OUI <input type="checkbox"/> NO/NON IF SO, WHICH ONES? / SI OUI, AVEC LESQUELLES? | Strong acids. Solution of this product upon prolonged contact with metals such as aluminum, tin, lead, lead zinc will produce flammable hydrogen gas. |
| REACTIVITY AND UNDER WHAT CONDITIONS / RÉACTIVITÉ – DANS QUELLES CONDITIONS? | See incompatibility section |
| HAZARDOUS DECOMPOSITION PRODUCTS / PRODUITS DE DÉCOMPOSITION DANGEREUX | Small amount of chlorine, carbon monoxide, hydrogen |

SECTION VI – TOXICOLOGICAL PROPERTIES OF MATERIAL / PROPRIÉTÉS TOXICOLOGIQUES DE LA MATIÈRE

ROUTE OF ENTRY / VOIE D'ADMINISTRATION

SKIN CONTACT / CONTACT AVEC LA PEAU SKIN ABSORPTION / ABSORPTION PAR LA PEAU
 EYE CONTACT / CONTACT OCULAIRE INHALATION ACUTE / INHALATION AIGUE
 INHALATION CHRONIC / INHALATION CHRONIQUE INGESTION

Inhalation of dusts may cause severe irritation to upper respiratory tract.

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| EFFECTS OF ACUTE EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION AIGUE A LA MATIERE | EYE: Will cause severe irritation, may cause chemical burns, corneal injury or damage. Dusts may irritate eyes. SKIN CONTACT: Brief contact may cause irritation, seen as local redness. Prolonged contact will cause chemical burns. INGESTION: Will cause chemical burns of the mouth, throat, esophagus and stomach. Signs and symptoms will include pain or discomfort in the mouth, chest and abdomen, nausea, vomiting, diarrhea, dizziness, weakness, collapse, coma. |
| EFFECTS OF CHRONIC EXPOSURE TO MATERIAL / EFFETS DE L'EXPOSITION CHRONIQUE A LA MATIERE | Although no long term human studies have been reported, there are no reported chronic effects that warrant control beyond that required for effects of acute exposure. |

MATERIAL NAME / IDENTIFIER - NOM / IDENTIFICATION DE LA MATIÈRE↓**Dishglo Powdered Dishwashing Detergent**

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| LD 50 OF MATERIAL [SPECIFY SPECIES & ROUTE] / LD50 DE LA MATIÈRE [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION] | 2400 mg/kgm Rat, Oral |
| LC50 OF MATERIAL [SPECIFY SPECIES & ROUTE] LC50 DE LA MATIÈRE / [PRÉCISER L'ESPECE ET LA VOIE D'ADMINISTRATION] | Not Established |
| EXPOSURE [LIMITS] / LIMITS D'EXPOSITION | > 3 mg/m ³ |
| IRRITANCY OF MATERIAL/PROPRIÉTÉ IRRITANTE DE LA MATIÈRE | Eyes, skin, respiratory tract |
| SENSITIZATION OF MATERIAL / SENSIBILISATION A LA MATIÈRE | Eyes, skin, respiratory tract |
| SYNERGISTIC MATERIALS / MATÉRES SYNERGIQUES | None known |
| CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY / CANCÉROGÉNÉCITÉ, EFFETS NOCIFES SUR LA REPRODUCTION, TÉRATOGENÉCITÉ, MUTAGÉNÉCITÉ | None of the ingredients contained in this product are regulated as carcinogens by OSHA |

SECTION VII – PREVENTIVES MEASURES / MESURES PRÉVENTIVES**PERSONAL PROTECTIVE EQUIPMENT / MATÉRIEL PERSONNEL DE PROTECTION**

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| GLOVES (SPECIFY) GANTS [PRÉCISER] | Plastic or rubber gloves |
| EYE [SPECIFY] / YEUX [PRÉCISER] | Glasses |
| RESPIRATORY (SPECIFY) / APPAREIL RESPIRATOIRE (PRÉCISÉR) | When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator. |
| OTHER (SPECIFY) / AUTRES (PRCISER) | Use protective clothing as required. |
| ENGINEERING CONTROLS [E.G. VENTILATION, ENCLOSED PROCESS, SPECIFY] / MÉCANISMES TECHNIQUES [EX. VENTILATION, OPÉRATION EN MILIEU FERMÉ, PRÉCISER] | Control airborne concentrations below the exposure guidelines. Local exhaust ventilation may be necessary for some operations. |

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| LEAK AND SPILL PROCEDURE / MESURES EN CAS DE FUITE OU DE DÉVERSEMENT | Acting cautiously, accidental spills of this product must first be shoveled up. Then carefully flush the spill area with water. |
| WASTE DISPOSAL / ÉLIMINATION DES RÉSIDUS | If material can not be salvaged, a method of disposal is in a landfill in accordance with all local and federal regulations. |
| HANDLING PROCEDURES AND EQUIPMENTS / MÉTHODES ET ÉQUIPEMENT POUR LA MANUTENTION | Avoid any contact with eyes and skin. Avoid inhalation of dusts. |
| STORAGE REQUIREMENTS / EXIGENCES D'ENTREPOSAGE | Store in a dry place, in closed containers and away from children. |
| SPECIAL SHIPPING INFORMATION / RENSEIGNEMENTS SPÉCIAUX POUR L'EXPÉDITION | None Required |

SECTION VIII – FIRST AID MEASURES / PREMIERS SOINS

EYE CONTACT: Immediately flush with lots of running water for 15 minutes, lifting the upper and lower eyelids occasionally. Get immediate medical attention.

SKIN CONTACT: Immediately wash skin with lots of water. If available neutralize with dilute vinegar or lemon juice. Remove contaminated clothing and shoes; wash before reuse. Get medical attention.

IF SWALLOWED: Do not induce vomiting. If conscious, give lots of water or milk, then dilute vinegar, lemon juice or orange juice. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.

INHALATION: Remove to fresh air. Give artificial respiration if not breathing. Oxygen may be given if necessary. Call a physician and/or transport to a medical facility.

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| ADDITIONAL INFORMATION / RENSEIGNEMENTS SUPPLÉMENTAIRES | |
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SECTION IX – PREPARATION DATE OF M.S.D.S. / FICHE SIGNALÉTIQUE

PREPARED BY: Gus Kaklamanos - CHEMIST

TELEPHONE NO.: (416) 2617182

DATE: January 01, 2010

ADDITIONAL NOTES OR REFERENCES / NOTES ADDITIONNELLES OU RÉFÉRENCES:

WHMIS CLASSIFICATION: Class E
Class D, 2A & 2B