



BARTEK Ingredients Inc.

A Taste for Today and Tomorrow

BARTEK INGREDIENTS INC.
421 SEAMAN STREET
STONEY CREEK; ONTARIO; L8E 3J4
CANADA

PRODUIT: ANHYDRE MALEIQUE

Section 01: IDENTIFICATION DU PRODUIT CHIMIQUE ET DE LA SOCIETE

FABRICANT..... BARTEK INGREDIENTS INC.
421 SEAMAN STREET
STONEY CREEK
ONTARIO
CANADA
L8E 3J4
905-662-3292

REDIGE PAR..... AFFAIRES RÉGLEMENTAIRES

DATE DU PREPARATION..... JUN15/09

NOM CHIMIQUE..... ANHYDRE MALEIQUE

NOM ET SYNONYMES CHIMIQUES:..... CIS-BUTENEDIOIC ANHYDRIDE.

FORMULE CHIMIQUE..... C4H2O3.

USAGE DE PRODUIT..... CHEMICAL SYNTHESIS, INTERMEDIATE.

NUMERO DE TELEPHONE D'URGENCE.... EN CAS D'URGENCE METTANT EN CAUSE DES MARCHANDISES DANGEREUSES,
APPELER CANUTEC AU 613 996-6666 (24 HEURES).

Section 02: COMPOSITION/INFORMATION SUR LES COMPOSANTS

INGREDIENTS DANGEREUX	%	LIMITES D'EXP	#C.A.S.	DL/50, VOIE, ESPECE	CL/50 VOIE, ESPECE
ANHYDRE MALEIQUE	>99.5	VOIR LA SECTION 11	108-31-6	VOIR LA SECTION 11	VOIR LA SECTION 11

Section 03: IDENTIFICATION DES DANGERS

VOIE DE PENETRATION

CONTACT AVEC LA PEAU..... CE PRODUIT BRULE LA PEAU.

ABSORPTION PAR LA PEAU..... DANGEREUX SI ABSORBE PAR LA PEAU.

CONTACT AVEC LES YEUX..... CAUSE DES BRULURES AUX YEUX.

INHALATION AIGUE..... CAUSES RESPIRATORY TRACT IRRITATION AND CAN CAUSE DAMAGE.

INGESTION..... NOCIF OU FATAL SI C'EST AVALER.

EFFETS D'EXPOSITION AIGUE..... CORROSIVE. MOLTEN PRODUCT CAN CAUSE THERMAL BURNS. EXTREMELY DANGEROUS IN CASE OF SKIN CONTACT (CORROSIVE, IRRITANT), OF EYE CONTACT (IRRITANT) AND INHALATION. VERY DANGEROUS IN CASE OF INGESTION. SLIGHTLY DANGEROUS IN CASE OF SKIN CONTACT (SENSITIZER). EYE CONTACT CAN RESULT IN CORNEAL DAMAGE OR BLINDNESS. INHALATION OF DUST WILL PRODUCE IRRITATION TO GASTRO-INTESTINAL OR RESPIRATORY TRACT, CHARACTERIZED BY BURNING, SNEEZING AND COUGHING.

EFFETS D'EXPOSITION CHRONIQUE..... MAY CAUSE ALLERGIC SKIN AND RESPIRATORY (ASTHMA LIKE) REACTION. REPEATED EXPOSURE OF THE EYES TO LOW LEVEL DUST CAN PRODUCE IRRITATION. REPEATED SKIN EXPOSURE CAN CAUSE LOCAL SKIN DESTRUCTION OR DERMATITIS. REPEATED INHALATION CAN CAUSE A VARYING DEGREE OF RESPIRATORY IRRITATION OR LUNG DAMAGE. REPEATED EXPOSURE TO A HIGHLY TOXIC MATERIAL MAY PRODUCE GENERAL DETERIORATION OF HEALTH BY ACCUMULATION IN ONE OR MANY HUMAN ORGANS.

HMS HAZARD RATINGS:..... HEALTH - 3; FLAMMABILITY - 1; CHEMICAL REACTIVITY - 1.

Section 04: PREMIERS SECOURS

INHALATION..... ALLOW THE VICTIM TO REST IN A WELL VENTILATED AREA. SEEK IMMEDIATE MEDICAL ATTENTION.

CONTACT AVEC LES YEUX:..... IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES, KEEPING EYELIDS OPEN. SEEK MEDICAL ATTENTION.

CONTACT AVEC LA PEAU..... AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATER. IF IRRITATION PERSISTS SEEK MEDICAL ATTENTION. WASH CONTAMINATED CLOTHING BEFORE REUSING.

INGESTION:..... DO NOT INDUCE VOMITING. HAVE A CONSCIOUS PERSON DRINK SEVERAL GLASSES OF WATER OR MILK. SEEK IMMEDIATE MEDICAL ATTENTION.

INDICATIONS POUR LE MEDECIN:..... P.D.

PRODUIT: ANHYDRE MALEIQUE**Section 05: MESURES A PRENDRE EN CAS D'INCENDIE**

INFLAMMABILITE.....	ININFLAMMABLE.
SI OUI, SOUS QUELLES CONDITIONS?	
MOYENS D'EXTINCTION.....	SMALL FIRE: CARBON DIOXIDE, WATER, FOAM. LARGE FIRE: WATER SPRAY, FOG OR FOAM, DO NOT USE WATER JET. DO NOT USE DRY CHEMICAL: LARGE VOLUMES OF GASES COULD BE PRODUCED BY REACTION WITH MALEIC ANHYDRIDE.
PROCÉDURES DE LUTTE CONTRE L'INCENDIE	WEAR SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE AND FULL BODY PROTECTION WHEN FIGHTING FIRES.
POINT D'ECLAIR (C), METHODE.....	102°C (215°F) (PMCC).
TEMPERATURE D'AUTO IMFLAMMATION.	477°C (890°F).
SEUIL MAXIMAL D'INFLAMMABILITE (% ... PAR VOL.)	7.1.
SEUIL MINIMAL D'IMFLAMMABILITE (% PAR VOL.)	1.4.
SENSIBILITE AUX DECHARGES STATIQUES	P.D.
SENSIBILITE AUX CHOCS.....	P.D.
PRODUITS DE COMBUSTION DANGEREUX	DIOXYDE DE CARBONE, MONOXYDE DE CARBONE. .
DANGERS PARTICULIERS DE FEU ET D'EXPLOSION	UNSTABLE, OR AIR-REACTIVE OR WATER-REACTIVE CHEMICAL INVOLVED (SEE SECTION 10). VAPORS FROM MELTED MATERIAL CAN BE IGNITED. KEEP MELTED MATERIAL AWAY FROM IGNITION SOURCES. MAY FORM FLAMMABLE DUST-AIR MIXTURES WHEN FINELY DIVIDED. PREVENT DUST BUILDUP BY PROVIDING ADEQUATE VENTILATION DURING GRINDING OR MILLING OPERATIONS.

Section 06: MESURES A PRENDRE EN CAS DE DEGAGEMENTS OU DEVERSEMENTS ACCIDENTELS

PROCEDURES DE NETTOYAGE FUIE/DEVERSEMENT	AVOID BREATHING DUST. PRESSURE DEMAND AIR SUPPLIED RESPIRATORS SHOULD ALWAYS BE WORN WHEN THE AIRBORNE CONCENTRATION OF THE CONTAMINANT OR OXYGEN IS UNKNOWN. OTHERWISE, WEAR RESPIRATORY PROTECTION AND OTHER PERSONAL PROTECTIVE EQUIPMENT AS APPROPRIATE FOR THE POTENTIAL EXPOSURE HAZARD. WEAR GLOVES, GOGGLES, AND PROTECTIVE CLOTHING TO AVOID CONTACT WITH EYES, SKIN, OR CLOTHING. USE APPROPRIATE TOOLS TO PUT THE SPILLED SOLID IN A WASTE DISPOSAL CONTAINER. IF NECESSARY, NEUTRALIZE THE RESIDUE WITH A DILUTE SOLUTION OF SODIUM HYDROXIDE. DO NOT DRY SWEEP OR USE METHODS THAT INCREASE DUSTING. PREVENT ENTRY INTO SEWERS AND WATERWAYS.
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Section 07: MANIPULATION ET LE STOCKAGE

PROCEDURES DE MANUTENTION ET EQUIPEMENT	MINIMUM FEASIBLE HANDLING TEMPERATURES SHOULD BE MAINTAINED. AVOID GENERATING MIST OR DUST. EXERCISE CARE WHEN OPENING BLEEDERS AND SAMPLING PORTS. DO NOT BREATHE GAS, FUMES, VAPOR OR SPRAY. DO NOT INGEST. AVOID CONTACT WITH SKIN AND EYES. AFTER HANDLING, ALWAYS WASH HANDS THOROUGHLY WITH SOAP AND WATER.
CONDITIONS D'ENTREPOSAGE.....	STORE AWAY FROM INCOMPATIBLE MATERIALS. STORE AT TEMPERATURES NOT EXCEEDING 70°C (158°F). CONTAINS MOISTURE SENSITIVE MATERIAL - STORE IN A DRY PLACE.

Section 08: CONTROLE DE L'EXPOSITION/LA PROTECTION INDIVIDUELLE

PROTECTION DES YEUX ET DU VISAGE..	CHEMICAL TYPE GOGGLES WITH FACE SHIELD MUST BE WORN. DO NOT WEAR CONTACT LENSES.
PROTECTION DE LA PEAU.....	GLOVES RESISTANT TO CHEMICALS AND PETROLEUM DISTILLATES REQUIRED. .
PROTECTION RESPIRATOIRE.....	IF DUST IS GENERATED AND THE OCCUPATIONAL EXPOSURE LIMIT OF THE PRODUCT IS EXCEEDED, USE APPROPRIATE NIOSH OR MSHA APPROVED AIR PURIFYING OR AIR SUPPLIED RESPIRATOR AFTER DETERMINING THE AIRBORNE CONCENTRATION OF THE CONTAMINANT. AIR SUPPLIED RESPIRATORS SHOULD ALWAYS BE WORN WHEN AIRBORNE CONCENTRATION OF THE CONTAMINANT OR OXYGEN CONTENT IS UNKNOWN.
VETEMENTS DE PROTECTION.....	PROTECTIVE CLOTHING SUCH AS COVERALLS OR LAB COATS MUST BE WORN. WHEN HANDLING LARGE QUANTITIES, IMPERVIOUS SUITS, GLOVES, AND RUBBER BOOTS MUST BE WORN. REMOVE AND DRY-CLEAN OR LAUNDER CLOTHING SOAKED OR SPOILED WITH THIS MATERIAL BEFORE REUSE. DRY CLEANING OF CONTAMINATED CLOTHING MAY BE MORE EFFECTIVE THAN NORMAL LAUNDERING. INFORM INDIVIDUALS RESPONSIBLE FOR CLEANING OF POTENTIAL HAZARDS ASSOCIATED WITH HANDLING CONTAMINATED CLOTHING.
AUTRE.....	LES INSTALLATIONS QUI ENTREPOSENT OU UTILISENT CE PRODUIT, DOIVENT VOIR UNE DOUCHE DE SECURITE ET UNE DOUCHE OCULAIRE À PROXIMITÉ.
CONTROLES D'INGENIERIE.....	ADEQUATE TO MEET OCCUPATIONAL EXPOSURE LIMITS.

PRODUIT: ANHYDRE MALEIQUE**Section 09: PROPRIÉTÉS PHYSIQUES ET CHIMIQUES**

ÉTAT PHYSIQUE.....	MOLTEN LIQUID.
APPARENCE.....	WATER WHITE.
ODEUR.....	STRONG IRRITATING ACRID ODOUR.
SEUIL DE L'ODEUR.....	0.5 PPM.
PRESSION DE VAPEUR (MMHG).....	0.2 MM HG AT 25°C.
DENSITÉ DE VAPEUR (AIR=1).....	3.38.
PAR VOLUME	
PAR POIDS	
TAUX D'ÉVAPORATION.....	P.D.
POINT D'ÉBULLITION.....	202 C (395 F).
POINT DE FUSION/CONGÉLATION.....	52.5 C (126.5 F).
PH.....	2.42 (0.1 M SOLUTION).
DENSITÉ (EAU=1).....	MOLTEN: 1.3 AT 70 (C).
SOLUBILITÉ DANS L'EAU (20 C).....	VERY SOLUBLE (40GM/100ML).
SOLUBLE IN OTHER SOLVENTS.....	CHLOROFORM, ACETONE, ETHYL ACETATE, BENZENE, HYDROCARBONS, DIOXANE.
COEFFICIENT DE REPARTITION EAU/HUILE.....	P.D.

Section 10: STABILITÉ ET REACTIVITÉ

STABLE CHIMIQUEMENT.....	STABLE EXCEPT WHEN IN CONTACT WITH WATER.
CONDITIONS À ÉVITER.....	MOISTURE.
INCOMPATIBILITÉ/MATÉRIAUX À ÉVITER	MAY REACT VIOLENTLY WITH AMINES, ALKALI METAL IONS SUCH AS SODIUM OR POTASSIUM, AND BASES. AT TEMPERATURES ABOVE 150°C, THESE MATERIALS, AT CONCENTRATIONS AS LOW AS 200 PPM., CAN TRIGGER A RAPID DECOMPOSITION AND POLYMERIZATION REACTION THAT WOULD PRODUCE HEAT AND GAS AND CAUSE EQUIPMENT TO RUPTURE.
REACTIVITÉ, SOUS QUELLES CONDITIONS?	CONTACT AVEC DES MATIÈRES INCOMPATIBLES .
PRODUITS DANGEREUX DE DÉCOMPOSITION	TOXIC LEVELS OF CARBON MONOXIDE, CARBON DIOXIDE, IRRITATING ALDEHYDES AND KETONES MAY BE FORMED ON BURNING. HEATING IN AIR MAY PRODUCE IRRITATING ALDEHYDES, ACIDS, AND KETONES.
RISQUE DE POLYMERISATION DANGÉREUSE.	WILL NOT SELF-POLYMERIZE BUT CAN UNDERGO UNCONTROLLED CO-POLYMERIZATION IN THE PRESENCE OF OTHER MONOMERS AND CATALYSTS (SEE INCOMPATIBLE MATERIALS, ABOVE).

Section 11: DONNÉES TOXICOLOGIQUES

LIMITE D'EXPOSITION DU PRODUIT.....	TLV-TWA: 0.1 PPM (ACGIH TLV, UNITED STATES, 2008); TWA: 0.25 PPM 8 HOURS (OSHA PEL, UNITED STATES, 1971); TWA: 1 MG/M3 8 HOURS (OSHA PEL, UNITED STATES, 1971).
CL 50 DU PRODUIT, ESPÈCES ET VOIE D'ADMINISTRATION	TCLO (INHALATION, RODENT - RAT): 9800 UG/M3/6H/26W-I. REFERENCE: FAATDF FUNDAMENTAL AND APPLIED TOXICOLOGY. (ACADEMIC PRESS, INC., 1 E. FIRST ST., DULUTH, MN 55802) V.1-1981-VOLUME(ISSUE)/PAGE/YEAR: 10,517,1988. .
DL 50 DU PRODUIT, ESPÈCES ET VOIE D'ADMINISTRATION	LD50 (ORAL, RAT): 1030 MG/KG; LD50 (DERMAL, RABBIT): 2620 MG/KG.
CANCÉROGENICITÉ DU PRODUIT.....	IARC: PA RÉPERTORIÉ.
EFFETS DE REPRODUCTION.....	P.D.
TERATOGENÈSE.....	P.D.
MUTAGÈNESE.....	P.D.
IRRITATION DU PRODUIT.....	SE REPORTER A LA SECTION 03.
CAPACITÉ DE SENSIBILISATION DU PRODUIT	THE LIMITED NUMBER OF ANIMAL STUDIES INVESTIGATING THE DERMAL OR RESPIRATORY SENSITIZATION POTENTIAL OF MALEIC ANHYDRIDE HAVE NOT SHOWN CONCLUSIVE EVIDENCE OF SENSITIZATION POTENTIAL. ALTHOUGH THERE HAVE BEEN REPORTS OF HUMAN DERMAL OR RESPIRATORY SENSITIZATION FROM MALEIC ANHYDRIDE EXPOSURES, THE NUMBER OF REPORTS HAS BEEN LOW WHEN COMPARED TO THE NUMBER OF POTENTIALLY EXPOSED INDIVIDUALS. MALEIC ANHYDRIDE HAS A LOW POTENTIAL FOR HUMAN DERMAL OR RESPIRATORY SENSITIZATION.
PRODUITS SYNERGIQUES.....	P.D.

Section 12: DONNÉES ÉCOLOGIQUES

AQUATIC TOXICITY.....	LC50 - 96HR 230 MG/LITER (MOSQUITO FISH) PRACTICALLY NONTOXIC. LC50 - 24HR 150 MG/LITER (BLUE GILL SUNFISH) PRACTICALLY NONTOXIC. THIS PRODUCT WILL HYDROLYZE RAPIDLY TO THE ACID. EXPECTED TO BE SLIGHTLY TOXIC TO AQUATIC SPECIES BECAUSE OF ACIDITY.
MOBILITY.....	THIS PRODUCT IS NOT LIKELY TO VOLATILIZE RAPIDLY INTO THE AIR BECAUSE OF ITS LOW VAPOUR PRESSURE.
BIOACCUMULATIVE POTENTIAL.....	THIS PRODUCT IS NOT EXPECTED TO BIOACCUMULATE THROUGH FOOD CHAINS IN THE ENVIRONMENT.

PRODUIT: ANHYDRE MALEIQUE**Section 13: DONNEES SUR L'ELIMINATION DU PRODUIT**

EVACUATIONS DES DECHETS, ÉLIMINER CONFORMÉMENT À TOUS LES RÈGLEMENTS FÉDÉRAUX, PROVINCIAUX
METHODES ET EQUIPEMENTS ET LOCAUX APPLICABLES.

Section 14: INFORMATIONS SUR LE TRANSPORT

ÉTATS-UNIS:

D.O.T. CLASSIFICATION:..... 8.
D.O.T. NOM D'EXPEDITION:..... MALEIC ANHYDRIDE.

CANADA:

CLASSIFICATION DU TMD..... 8.
NOM APPROPRIÉ D'EXPEDITION:..... MALEIC ANHYDRIDE.
NUMERO DE L'ONU..... 2215.
GROUPE D'EMBALLAGE..... III.
INSTRUCTIONS SPECIALES POUR U.S. D.O.T. REPORTABLE QUANTITY: 5000 LBS. (2268 KG). P.D.
EXPEDITIONS

Section 15: INFORMATIONS SUR LA REGLEMENTATION

REGLEMENTS DES ETATS-UNIS:

TSCA INVENTORY:..... LISTED.
SARA TITLE III:..... SECTION 302: THIS PRODUCT IS NOT REGULATED UNDER SECTION 302 OF SARA
AND 40CFR PART 355. SECTION 311: MALEIC ANHYDRIDE, IMMEDIATE (ACUTE)
HEALTH HAZARD, DELAYED (CHRONIC) HEALTH HAZARD. SECTION 313: MALEIC
ANHYDRIDE 100%.

CERCLA 102 A:..... MALEIC ANHYDRIDE 100%, RQ 5000 LBS.
STATE REGULATIONS:..... PENNSYLVANIA RTK: MALEIC ANHYDRIDE (ENVIRONMENTAL HAZARD, GENERIC
ENVIRONMENTAL HAZARD). MASSACHUSETTS RTK: MALEIC ANHYDRIDE. NEW
JERSEY RTK: MALEIC ANHYDRIDE. CONNECTICUT RTK: MALEIC ANHYDRIDE.
FLORIDA RTK: MALEIC ANHYDRIDE. ILLINOIS RTK: MALEIC ANHYDRIDE. RHODE
ISLAND RTK: MALEIC ANHYDRIDE. CALIFORNIA PROP. 65: NO PRODUCTS WERE
FOUND.

REGLEMENTS DU CANADA:

CLASSIFICATION SIMDUT..... D1B, D2A, D2B, E.
CONFORMEMENT DU RPC..... LE PRODUIT A ÉTÉ RÉPERTORIÉ CONFORMÉMENT AUX CRITÈRES DE DANGER
DU RÉGLEMENT SUR LES PRODUITS CONTRÔLÉS ET LA PRÉSENTE FICHE
SIGNALÉTIQUE RENFERME TOUS LES RENSEIGNEMENTS EXIGÉS PAR LE
RÉGLEMENT EN QUESTION.
DSL..... LA MATIÈRE EST RÉPERTORIÉE DANS LA LISTE INTÉRIEURE DES SUBSTANCES
(CANADA).

Section 16: AUTRES INFORMATIONS

RENSEIGNEMENTS SUPPLEMENTAIRES. BARTEK INGREDIENTS INC. NE PEUT PRÉVOIR TOUTES LES CONDITIONS SOUS
LESQUELLES LA PRÉSENTE INFORMATION ET SON PRODUIT, OU LES PRODUITS
D'AUTRES FABRICANTS EN COMBINAISON AVEC SON PRODUIT, PEUVENT ÊTRE
UTILISÉS. IL INCOMBE À L'UTILISATEUR DE S'ASSURER QUE LA MANUTENTION,
L'ENTREPOSAGE ET L'ÉLIMINATION DU PRODUIT SE FONT DANS DES
CONDITIONS SÉCURITAIRES ET D'EN ASSURER LA RESPONSABILITÉ QUANT À LA
PERTE, AUX BLESSURES, AUX DOMMAGES OU AUX DÉPENSES ATTRIBUABLES À
UN USAGE INAPPROPRIÉ. LA PRÉSENTE INFORMATION EST PUBLIÉE DE BONNE
FOI, MAIS AUCUNE GARANTIE, EXPRESSE OU IMPLICITE, N'EST ACCORDÉE.

S.O.=SANS OBJET
P.D.=PAS DISPONIBLE