SAFETY DATA SHEET

1. Identification

Product identifier **TUMS TABLETS**

Other means of identification

Synonyms ANDREWS TUMS ANTACID ORANGE CHEWABLE TABLETS (AUSTRALIA) * ENO TABS ASSORTED FRUITS * ENO TUMS ASSORTED FRUIT FLAVOURS * ENO TUMS ORANGE FLAVOUR * ENO TUMS PEPPERMINT FLAVOUR * 3001101-0046 TUMS REGULAR PEPPERMINT * 3001101-0047 (CHERRY) * 3001101-0048 (ORANGE) * 3001101-0048 ENO TUMS ORANGE * 3001101-0049 (LEMON) * 3001101-0050 (LIME) * ENO TUMS ASSORTED FRUIT * TUMS REGULAR ASSORTED FRUIT TABLETS * TUMS REGULAR FRUIT 500MG CHEWABLE TABLETS * TUMS ASSORTED FRUIT * TUMS REGULAR ASSORTED FLAVOURS * 3001104-0042 (CHERRY) * 3001104-0043 TUMS EXTRA STRENGTH ORANGE * 3001104-0044 (LEMON) * 3001104-0045 (LIME) * 3001104-0046 TUMS EX STRENGTH WINTERGREEN * TUMS EX 750 EXTRA STRENGTH ASSORTED FRUIT * 3001111-0017 (CHERRY) * 3001111-0018 (ORANGE) * 3001111-0019 (LEMON) * 3001111-0020 (LIME) * TUMS ULTRA STRENGTH ASSORTED FRUIT * 3001111-0023 (TROPICAL PUNCH) * 3001111-0024 (MANDARIN ORANGE) * 3001111-0025 (ORANGE PINEAPPLE) * TUMS ULTRA ASSORTED TROPICAL * 3001109-0018 (TROPICAL PUNCH) * 3001109-0019 (MANDARIN ORANGE) * 3001109-0020 (ORANGE PINEAPPLE) * 3001109-0021 (BANANA BERRY) * 3001109-0021 TUMS EX STRENGTH BANANA BERRY * TUMS EX TROPICAL FRUIT FLAVOURS * TUMS EX ASSORTED FRUIT CHEWABLE TABLETS * TUMS EX 750 EXTRA STRENGTH ASSORTED TROPICAL FRUIT * TUMS EXTRA STRENGTH ASSORTED TROPICAL FRUIT * TUMS EXTRA STRENGTH TROPICAL FRUIT * TUMS TROPICAL FRUIT 750MG * MFC50195 TUMS EXTRA STRENGTH SMOOTHIES BERRY FUSION (ORANGE PASSION FRUIT) * MFC50991 TUMS EXTRA STRENGTH SMOOTHIES BERRY FUSION (SMOOTHIES STRAWBERRY) * MFC51041 TUMS EXTRA STRENGTH SMOOTHIES BERRY FUSION (SMOOTHIES CHERRY) * MFC51044 * MFC51081 TUMS FRESHERS SPEARMINT * MFC51161 TUMS FRESHERS COOL BERRY * TUMS ASSORTED FRUIT * TUMS ASSORTED FRUIT ANTACID TABLETS 500MG * TUMS EX EXTRA ASSORTED FLAVOURS * TUMS EX ASSORTED FRUIT CHEWABLE TABLETS * TUMS EX TABLETS ASSORTED FRUIT * TUMS EX 750 EXTRA STRENGTH ASSORTED FRUIT * TUMS E-X ASSORTED FRUIT * TUMS EXTRA ASSORTED FLAVOURS * TUMS EXTRA STRENGTH ASSORTED FRUIT TABLETS * TUMS PLUS 750MG ASSORTED FRUIT * CALCIUM CARBONATE, FORMULATED PRODUCT

Recommended use Medicinal Product

This safety data sheet is written to provide health, safety and environmental information for people handling this formulated product in the workplace. It is not intended to provide information relevant to medicinal use of the product. In this instance patients should consult prescribing information/package insert/product label or consult their pharmacist or physician. For health and safety information for individual ingredients used during manufacturing, refer to the appropriate safety data sheet for each ingredient.

Recommended restrictions No other uses are advised.

Manufacturer/Importer/Supplier/Distributor information

COMPANY NAME	GlaxoSmithKline US
Address:	5 Moore Drive Research Triangle Park, NC 27709 USA
Telephone:	+1-888-825-5249 (General Inquiries)
Email:	msds@gsk.com
Website:	www.gsk.com

EMERGENCY CONTACTS

	CHEMTREC EMERGENCY NUMBERS
Telephone:	+(1) 703 527 3887 (International) 24/7; multi-language response
Contract Number:	CCN9484
	VERISK 3E GLOBAL INCIDENT RESPONSE
Telephone:	+(1) 760 476 3971 (In country) +(1) 760 476 3962 or +(1) 866 519 4752 (International) 24/7; multi-language response
Contract Number:	334878

2. Hazard(s) identification

Classified hazards

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

Label elements

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

Hazard(s) not otherwise classified (HNOC)

Exempt from requirements - product regulated as a medicinal product, cosmetic product or medical device.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
D-SORBITOL	SORBITOL L-GULITOL 1,2,3,4,5,6-HEXANEHEXOL D-SORBOL	50-70-4	40 - < 50
CALCIUM CARBONATE	CARBONIC ACID, CALCIUM SALT CALCIUM MONOCARBONATE PRECIPITATED CALCIUM CARBONATE CHALK	471-34-1	30 - < 40
SUCROSE	SUGAR CANE SUGAR BEET SUGAR CONFECTIONER'S SUGAR ALPHA-D-GLUCOPYRANOSIDE, BETA-D-FRUCTOFURANOSYL GRANULATED SUGAR SUCRALOX	57-50-1	20 - < 30
TALC	TALCUM, NON-ASBESTOS FORM TALC HYDROUS MAGNESIUM SILICATE	14807-96-6	5 - < 10
FLAVOURING		Unassigned	3 - < 5
MAGNESIUM CARBONATE	CARBONIC ACID, MAGNESIUM SALT CARBONATE MAGNESIUM	546-93-0	3 - < 5
MAGNESIUM STEARATE	STEARIC ACID, MAGNESIUM SALT MAGNESIUM DISTEARATE DIBASIC MAGNESIUM STEARATE MAGNESIUM DISTEARATE, PURE	557-04-0	3 - < 5
NON PAREIL SEEDS	NU-PAREILS SUGAR SPHERES OHS16853	Unassigned	3 - < 5

Chemical name	Common name and synonyms	CAS number	%
SODIUM BICARBONATE	BAKING SODA BICARBONATE OF SODA CARBONIC ACID MONOSODIUM SALT CARBONIC ACID SODIUM SALT (1:1) MONOSODIUM CARBONATE MONOSODIUM HYDROGEN CARBONATE RTECS VZ0950000 SODIUM ACID CARBONATE SODIUM HYDROGEN CARBONATE	144-55-8	3 - < 5
STARCH	ARROWROOT STARCH CORN STARCH POTATO STARCH RICE STARCH	9005-25-8	3 - < 5
CALCIUM STEARATE	CALCIUM DISTEARATE	1592-23-0	1 - < 3
CITRIC ACID ANHYDROUS	BETA-HYDROXYTRICARBALLYLIC ACID ANHYDROUS CITRIC ACID 2-HYDROXY-1,2,3-PROPANETRICARBOXYLIC ACID CITIRIC ACID	77-92-9	1 - < 3
LIGHT MINERAL OIL	OHS12791 RTECS PY8047000	8042-47-5	1 - < 3
MALIC ACID	HYDROXYSUCCINIC ACID HYROXYBUTANEDIOIC ACID	6915-15-7	1 - < 3
MICROCRYSTALLINE CELLULOSE	AVICEL PH MICROCRYSTALLINE CELLULOSE ALPHA-CELLULOSE AVICEL PH101 AVICEL PH102 AVICEL PH103 AVICEL PH105 AVICEL PH112 AVICEL PH200 CELLULOSE (8CI9CI) CELLULOSE CRYSTALLINE CELLULOSE, FOOD GRADE CRYSTALLINE CELLULOSE	9004-34-6	0 - 2.2
PARAFFIN OIL	LIGHT LIQUID PARAFFIN HIGHLY-REFINED MINERAL OIL WHITE LIQUID PARAFFIN LIQUID PETROLATUM MINERAL SOLVENT (VARSOL)	8012-95-1	0 - 1.2
ADIPIC ACID	HEXANEDIOIC ACID 1,4-BUTANEDICARBOXYLIC ACID 1,6-HEXANEDIOIC ACID ADIPINIC ACID	124-04-9	< 1
CHERRY FLAVOR		Unassigned	0 - 1
FLAVOR #13573254 LIME NATURAL SPRAY DRIED - TM26	LIME NATURAL SPRAY DRIED - TM26 LIME - TM26	Unassigned	0 - 1
13508848 NATURAL LEMON FLAVOR SPRAY DRIED - TM09	LEMON SPRAY DRIED NATURAL FLAVOUR #13508848 NATURAL LEMON FLAVOR - TM09 NATURAL LEMON FLAVOR (IFF USA FLAVORS)	Unassigned	0 - 0.74
PEPPERMINT FLAVOUR	SPRAY DRIED PEPPERMINT TM17	Unassigned	< 0.3
SODIUM HEXAMETAPHOSPHATE	METAPHOSPHORIC ACID, HEXASODIUM SALT CALGON CHEMI-CHARL GILTEX HAGAN PHOSPHATE HEXASODIUM HEXAMETAPHOSPHATE HEXASODIUM METAPHOSPHATE RTECS OY3675000	10124-56-8	< 0.3

Chemical name	Common name and synonyms	CAS number	%
SUCRALOSE	MICRONIZED SUCRALOSE POWDERED SUCRALOSE NEAT SUCRALOSE	56038-13-2	< 0.2
SACCHARIN	1,2-BENZISOTHIAZOL-3(2H)-ONE, 1,1-DIOXIDE ANHYDRO-O-SULFAMINEBENZOIC ACI D BENZOIC SULPHINIDE O-BENZOYL SULFIMIDE SACCHARIN INSOLUBLE	81-07-2	< 0.1
Other components below reportable levels			25 - 60

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Immediately flush skin with plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if symptoms occur.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting without advice from poison control center.

Most important symptoms/effects, acute and delayed Irritant effects.

Indication of immediate medical attention and special treatment needed No specific antidotes are recommended. Treat according to locally accepted protocols. For additional guidance, refer to the local poison control information centre.

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Pre-placement and periodic health surveillance is not usually indicated. The final determination of the need for health surveillance should be determined by local risk assessment.

5. Fire-fighting measures

Suitable extinguishing media Dry chemical powder. Carbon dioxide (CO2). Water. Foam.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Use water spray to cool unopened containers.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards Expected to be non-combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

GSK

Components	Type	Value	Note
CITRIC ACID ANHYDROUS (CAS 77-92-9)	8 HR TWA	5000 mcg/m3	
	OHC	1	
FLAVOURING	OHC	3	>10 - </= 100 mcg/m3 PROVISIONAL
NON PAREIL SEEDS	OHC	1	PROVISIONAL
SACCHARIN (CAS 81-07-2)	8 HR TWA	5000 mcg/m3	
	OHC	1	
SODIUM BICARBONATE (CAS 144-55-8)	8 HR TWA	5000 mcg/m3	
	OHC	1	
SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8)	OHC	1	
SUCRALOSE (CAS 56038-13-2)	OHC	1	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
LIGHT MINERAL OIL (CAS 8042-47-5)	PEL	5 mg/m3	Mist.
MAGNESIUM CARBONATE (CAS 546-93-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
MICROCRYSTALLINE CELLULOSE (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
PARAFFIN OIL (CAS 8012-95-1)	PEL	5 mg/m3	Mist.
STARCH (CAS 9005-25-8)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
SUCROSE (CAS 57-50-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
TALC (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
ADIPIC ACID (CAS 124-04-9)	TWA	5 mg/m3	
CALCIUM STEARATE (CAS 1592-23-0)	TWA	10 mg/m3	
LIGHT MINERAL OIL (CAS 8042-47-5)	TWA	5 mg/m3	Inhalable fraction.
MAGNESIUM STEARATE (CAS 557-04-0)	TWA	10 mg/m3	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
MICROCRYSTALLINE CELLULOSE (CAS 9004-34-6)	TWA	10 mg/m3	
PARAFFIN OIL (CAS 8012-95-1)	TWA	5 mg/m3	Inhalable fraction.
STARCH (CAS 9005-25-8)	TWA	10 mg/m3	
SUCROSE (CAS 57-50-1)	TWA	10 mg/m3	
TALC (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CALCIUM CARBONATE (CAS 471-34-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
LIGHT MINERAL OIL (CAS 8042-47-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
MAGNESIUM CARBONATE (CAS 546-93-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
MICROCRYSTALLINE CELLULOSE (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
PARAFFIN OIL (CAS 8012-95-1)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
STARCH (CAS 9005-25-8)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
SUCROSE (CAS 57-50-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
TALC (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls General ventilation normally adequate. An Exposure Control Approach (ECA) is established for operations involving this material based upon the OEL/Occupational Hazard Category and the outcome of a site- or operation-specific risk assessment.

Individual protection measures, such as personal protective equipment

Eye/face protection Not normally needed. If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection Not normally needed. For prolonged or repeated skin contact use suitable protective gloves.

Other Not normally needed. Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection No personal respiratory protective equipment normally required. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. For advice on suitable monitoring methods, seek guidance from a qualified environment, health and safety professional.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Tablet.

Color Not available.

Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Dust explosion properties	
St class	No studies have been conducted.
Minimum ignition energy (MIE) - dust cloud	No studies have been conducted.
Train fire	No studies have been conducted.

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids. Fluorine.
Hazardous decomposition products	None known. Irritating and/or toxic fumes and gases may be emitted upon the products decomposition.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Health injuries are not known or expected under normal use. Inhalation of dusts may cause respiratory irritation.
Skin contact	Health injuries are not known or expected under normal use. Dust or powder may irritate the skin.
Eye contact	Health injuries are not known or expected under normal use. Dust or powder may irritate eye tissue.
Ingestion	Health injuries are not known or expected under normal use.

Symptoms related to the physical, chemical and toxicological characteristics Irritant effects.

Information on toxicological effects

Acute toxicity Health injuries are not known or expected under normal use.

Components	Species	Test Results
ADIPIC ACID (CAS 124-04-9)		
Acute		
Oral		
LD50	Rat	> 11 g/kg
CALCIUM CARBONATE (CAS 471-34-1)		
Acute		
Oral		
LD50	Rat	6450 mg/kg
CALCIUM STEARATE (CAS 1592-23-0)		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg
CITRIC ACID ANHYDROUS (CAS 77-92-9)		
Acute		
Oral		
LD50	Rat	11700 mg/kg
D-SORBITOL (CAS 50-70-4)		
Acute		
Oral		
LD50	Rat	15.9 g/kg
LIGHT MINERAL OIL (CAS 8042-47-5)		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg
MAGNESIUM STEARATE (CAS 557-04-0)		
Acute		
Oral		
LD50	Rat	> 2000 mg/kg
MICROCRYSTALLINE CELLULOSE (CAS 9004-34-6)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 2000 mg/kg
PARAFFIN OIL (CAS 8012-95-1)		
Acute		
Oral		
LD50	Mouse	22 g/kg
SACCHARIN (CAS 81-07-2)		
Acute		
Oral		
LD50	Mouse	17 g/kg

Components	Species	Test Results
SODIUM BICARBONATE (CAS 144-55-8)		
Acute		
Oral		
LD50	Rat	>= 7300 mg/kg
SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8)		
Acute		
Oral		
LD50	Rat	6200 mg/kg
SUCRALOSE (CAS 56038-13-2)		
Acute		
Oral		
LD50	Rat	10 g/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Health injuries are not known or expected under normal use. Prolonged skin contact may cause temporary irritation.

Irritation Corrosion - Skin: P.I.I. value

MAGNESIUM STEARATE	0
SUCRALOSE	0
CITRIC ACID ANHYDROUS	OECD 404 Result: Mild to moderate irritant. Species: Rabbit
SACCHARIN	OECD 404, Data for sodium saccharin Result: Mild irritation Species: Rabbit

Serious eye damage/eye irritation Health injuries are not known or expected under normal use. Dust or powder may irritate eye tissue.

Eye

CITRIC ACID ANHYDROUS	Acute ocular irritation; OECD 405 Result: Severe Irritant Species: Rabbit
SACCHARIN	OECD 405, Data for sodium saccharin. Result: Moderate Irritant Species: Rabbit

Eye / Kay and Calandra class - Intact

SUCRALOSE	4
MAGNESIUM STEARATE	4 Recovery Period: 2 days

Respiratory or skin sensitization

Respiratory sensitization Not applicable.

Skin sensitization Health injuries are not known or expected under normal use.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Carcinogenic effects are not expected as a result of occupational exposure. Contains a material (talc) classified as a carcinogen by external agencies. These effects are linked only to high doses of this substance; lower doses did not cause this adverse effect.

IARC Monographs. Overall Evaluation of Carcinogenicity

LIGHT MINERAL OIL (CAS 8042-47-5)	3 Not classifiable as to carcinogenicity to humans.
SACCHARIN (CAS 81-07-2)	3 Not classifiable as to carcinogenicity to humans.
TALC (CAS 14807-96-6)	2B Possibly carcinogenic to humans. 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

PARAFFIN OIL (CAS 8012-95-1)	Known To Be Human Carcinogen.

Reproductive toxicity Health injuries are not known or expected under normal use. Contains no ingredient listed as toxic to reproduction

Specific target organ toxicity - single exposure	None known.
Specific target organ toxicity - repeated exposure	None known.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Further information	Occupational exposure to the substance or mixture may cause adverse effects.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
ADIPIC ACID (CAS 124-04-9)			
Aquatic			
Acute			
Algae	EC50	Green algae (Scenedesmus subspicatus)	31.3 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna)	85.7 mg/l, 48 hours
Fish	EC50	Fathead minnow (Adult Pimephales promelas)	97 mg/l, 96 hours Static test
		Golden ide/orfe (Adult Leuciscus idus)	230 mg/l, 96 hours Static test
		Rainbow trout (Adult Oncorhyncus mykiss)	> 100 mg/l, 48 hours Static renewal test
CALCIUM CARBONATE (CAS 471-34-1)			
Aquatic			
Fish	LC50	Western mosquitofish (Gambusia affinis)	> 56000 mg/l, 24 hours
CALCIUM STEARATE (CAS 1592-23-0)			
Aquatic			
Acute			
Fish	EC50	Orange-red killfish (Adult Oryzias latipes)	266 mg/l, 96 hours
Microtox	EC50	Microtox	25.6 mg/l, 15 minutes
CITRIC ACID ANHYDROUS (CAS 77-92-9)			
Aquatic			
Acute			
Algae	NOEC	Green algae (Scenedesmus quadricauda)	425 mg/l, 8 days Static Test
Crustacea	EC50	Water flea (Daphnia magna)	120 mg/l, 72 hours Static test
Fish	EC50	Bluegill sunfish (Adult Lepomis macrochirus)	1516 mg/l, 96 hours Static test
		Golden ide/orfe (Adult Leuciscus idus)	440 - 760 mg/l, 96 hours Static test
MAGNESIUM STEARATE (CAS 557-04-0)			
Aquatic			
Acute			
Fish	EC50	Orange-red killfish (Adult Oryzias latipes)	130 mg/l, 96 hours
SACCHARIN (CAS 81-07-2)			
Aquatic			
Acute			
Fish	EC50	Fathead minnow (Adult Pimephales promelas)	15000 mg/l, 96 hours
SODIUM BICARBONATE (CAS 144-55-8)			
Aquatic			
Acute			
Algae	EC50	Algae (Nitscheria linearis)	650 mg/l, 5 days

Components		Species	Test Results
Crustacea	EC50	Water flea (Daphnia magna)	2350 mg/l, 48 hours Static test
Fish	EC50	Bluegill sunfish (Adult Lepomis macrochirus)	8250 - 9000 mg/l, 96 hours Static test
		Mosquito fish (Adult Gambusia affinis)	7550 mg/l, 96 hours Static test
SUCRALOSE (CAS 56038-13-2)			
Acute			
	IC50	Activated sludge	> 1000 mg/l, 3 hours
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	> 100 mg/l, 48 hours Static test
	NOEC	Water flea (Daphnia magna)	100 mg/l, 48 hours Static test
TALC (CAS 14807-96-6)			
Aquatic			
Acute			
Fish	EC50	Zebra fish (Adult Brachydanio rerio)	> 100 g/l, 24 hours Static renewal test

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Photolysis

Half-life (Photolysis-aqueous)

MALIC ACID	940 Days Estimated

Half-life (Photolysis-atmospheric)

ADIPIC ACID	2.9 Days Estimated
CALCIUM STEARATE	17 Hours Estimated
LIGHT MINERAL OIL	< 1 Days Estimated
MAGNESIUM STEARATE	17 Hours Estimated
MALIC ACID	2 Days Estimated
SACCHARIN	3 Days Estimated

UV/visible spectrum wavelength

MAGNESIUM STEARATE	210 nm

Biodegradability

Percent degradation (Aerobic biodegradation-inherent)

CALCIUM STEARATE	77 %, 28 days BOD
CITRIC ACID ANHYDROUS	98 %, 2 days Modified Zahn-Wellens, Activated sludge
MAGNESIUM STEARATE	77 %, 28 days BOD
MALIC ACID	68 %, 5 days BOD5, Activated sludge
NON PAREIL SEEDS	69 %, 5 days BOD5
SUCRALOSE	1 %, 28 days Modified Zahn-Wellens, Activated sludge
SUCROSE	69 % BOD5

Percent degradation (Aerobic biodegradation-ready)

ADIPIC ACID	100 %, 28 days Modified Sturm test., Activated sludge
CALCIUM STEARATE	95 %, 22 days Modified Sturm test.
LIGHT MINERAL OIL	24 %, 28 days Modified Sturm test., Activated sludge
MAGNESIUM STEARATE	95 %, 22 days Sturm test

Percent degradation (Aerobic biodegradation-soil)

CALCIUM STEARATE	> 50 %, 13 days
MAGNESIUM STEARATE	50 %, 13 days

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ADIPIC ACID	0.08
D-SORBITOL	-2.2
SACCHARIN	0.91
SUCROSE	-3

Bioconcentration factor (BCF)

ADIPIC ACID	0.68 Estimated
CALCIUM STEARATE	> 1000 Estimated
D-SORBITOL	1 Estimated
MAGNESIUM STEARATE	> 9999 Estimated

Bioconcentration factor (BCF)

MALIC ACID	0.1 - 0.3 Estimated
SACCHARIN	3 Estimated

Mobility in soil

Adsorption

Soil/sediment sorption - log Koc

ADIPIC ACID	1.4 Estimated
CALCIUM STEARATE	5.86 Estimated
D-SORBITOL	0.3 Estimated
MAGNESIUM STEARATE	5.86 Estimated
SACCHARIN	1.88 Estimated

Mobility in general

Volatility

Henry's law

ADIPIC ACID	0 atm m^3/mol Estimated
CITRIC ACID ANHYDROUS	< 0 atm m^3/mol Calculated, 25 °C
D-SORBITOL	0 atm m^3/mol Estimated
MALIC ACID	0 atm m^3/mol, 25 C Estimated
SACCHARIN	0 atm m^3/mol Estimated
SUCROSE	< 0 atm m^3/mol Estimated

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as a dangerous good.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ADIPIC ACID (CAS 124-04-9)	Listed.
SODIUM HEXAMETAPHOSPHATE (CAS 10124-56-8)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

MAGNESIUM CARBONATE (CAS 546-93-0)
PARAFFIN OIL (CAS 8012-95-1)
TALC (CAS 14807-96-6)

16. Other information, including date of preparation or last revision

Issue date	04-27-2018
Revision date	04-27-2018
Version #	10
Further information	HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 0 Instability: 0
References	GSK Hazard Determination
Disclaimer	The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.
Revision information	Product and Company Identification: Synonyms Composition / Information on Ingredients: Ingredients Toxicological information: Carcinogenicity