

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: Dibasic Ester
Product Name: Dibasic Ester
Revision Date: Aug 09, 2019
Version: 1.1
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 905-681-5353
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Product/Recommended Uses: For laboratory or industrial use only.

Date Printed: Apr 25, 2023
Supersedes Date: Aug 09, 2019

SECTION 2) HAZARDS IDENTIFICATION**Classification**

Eye Irritation - Category 2A
Skin Irritation - Category 2
Acute aquatic toxicity - Category 3

Safety data sheet prepared in accordance to the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Pictograms**Signal Word**

Warning

Hazardous Statements - Health

H319 - Causes serious eye irritation
H315 - Causes skin irritation

Hazardous Statements - Environmental

H402 - Harmful to aquatic life

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.

Precautionary Statements - Prevention

P273 - Avoid release to the environment.
P264 - Wash/Wash hands thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection/face protection.

Precautionary Statements - Response

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap.

P321 - Specific treatment (see first-aid on the SDS).

P332 + P313 - If skin irritation occurs: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

Precautionary Statements - Storage

No precautionary statement available.

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local/national/international regulation. Waste management should be in full compliance with national, regional and local laws.

Physical Hazards Not Otherwise Classified

No data available.

Health Hazards Not Otherwise Classified

No data available.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0001119-40-0	DIMETHYL GLUTARATE	60%
0000106-65-0	DIMETHYL SUCCINATE	20%
0000627-93-0	DIMETHYL ADIPATE	20%

SECTION 4) FIRST-AID MEASURES

Inhalation

Get medical advice/attention if you feel unwell or are concerned. Remove source of exposure or move person to fresh air and keep comfortable for breathing. Seek medical attention.

Eye Contact

If eye irritation persists: Get medical advice/attention. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. Seek medical attention.

Continue rinsing for a duration of 15-20 minutes or until medical aid is available.

Skin Contact

If skin irritation occurs or you feel unwell: Get medical advice/attention. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. Wash contaminated clothing before reuse. In case of burns:

Immediately apply cold water to burn either by immersion or wrapping with saturated clean cloth.

DO NOT remove or cut away clothing over burnt areas.

DO NOT pull away clothing which has adhered to the skin as this can cause further injury.

DO NOT break blister or remove solidified material.

Quickly cover wound with dressing or clean cloth to help prevent infection and to ease pain.

For large burns, sheets, towels or pillow slips are ideal; leave holes for eyes, nose and mouth.

DO NOT apply ointments, oils, butter, etc. to a burn under any circumstances.

Water may be given in small quantities if the person is conscious.

Treat for shock by keeping the person warm and in a lying position.

Seek medical aid and advise medical personnel in advance of the cause and extent of the injury and the estimated time of arrival of the patient. Wash contaminated clothing before re-use or discard.

Ingestion

Rinse mouth. If you feel unwell/If concerned: Call a POISON CENTER or doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position. Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:

INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient. No data available.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam. Do NOT direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.

Water spray or fog.

Foam.

Dry chemical powder.

BCF (where regulations permit).

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Fire will produce irritating gases. Runoff may pollute waterways

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear. Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Avoid contact with skin, eye or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Absorb Liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Avoid contact with skin, eye or clothing. Avoid breathing vapor or mist. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. All containers must be properly labelled. Eyewash stations and showers should be available in areas where this material is used and stored. Do not get in eyes, on skin or on clothing. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Use pneumatic and/or mechanical systems for bulk transfer of the substance. Use exhaust ventilation and/or dust collecting filters for bulk transfer and storage. Use approved respiratory protection when handling. Keep bulk of materials out of sewer drains.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

Store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous. Store in dry, cool areas, out of direct sunlight and away from other sources of heat. Store in original containers. Keep containers securely sealed.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. Wear indirect-vent, impact and splash resistant goggles when working with liquids.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection

program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

None of the chemicals in Section 3 are regulated under "ACGIH_carcinogen", "ACGIH_Notations", "ACGIH_TLV_Basis", "ACGIHsmg", "ACGIHsppm", "ACGIHtmg", "ACGIHtppm", "CAN_AL_Carcinogen", "CAN_AL_Notation", "CAN_ALsmg", "CAN_ALsppm", "CAN_ALtmg", "CAN_ALtppm", "CAN_ONsmg", "CAN_ONsppm", "CAN_ONtmg", "CAN_ONtppm", "CAN_QCVECDmg - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_mg", "CAN_QCVECDppm - CANADA_QUEBEC VALEUR D'EXPOSITION DE COURTE DURÉE_ppm", "CAN_QCVEMPmg - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_mg", "CAN_QCVEMPppm - CANADA_QUEBEC VALEUR D'EXPOSITION MOYENNE PONDÉRÉE_ppm", "CANsmg", "CANsppm", "CANTmg", "CANTppm", "OSHA_SkinDesignation", "OSHA_Tables_Z1_Z2_Z3", "OSHA_Carcinogen - OSHA Carcinogen", "OSHAsmg", "OSHA_sppm", "OSHAtmg", "OSHA_tppm"

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	1.08 g/cm3
Specific Gravity	1.00
Appearance	colourless liquid
Odor Description	slightly aromatic
Odor Threshold	N/A
pH	no data available
Melting/Freezing Point	-20.00 °C
Low Boiling Point	195.00 °C
High Boiling Point	230.00 °C
Flash Point	100.00 °C
Vapor Pressure	0.2 Hg at 20°C
Vapor Density	no data available
Evaporation Rate	no data available
Upper Explosion Level	N/A
Lower Explosion Level	N/A
Water Solubility	5.3 wt% at 20 °C
Coefficient Water/Oil	no data available
Viscosity	no data available

SECTION 10) STABILITY AND REACTIVITY

Reactivity

No data available.

Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid heat, sparks, flame, high temperature and contact with incompatible materials. No additional information available

Hazardous Reactions/Polymerization

Hazardous polymerization will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents. Strong oxidizers, acids, alkalis.

Hazardous Decomposition Products

Oxides of carbon. Under fire conditions: carbon oxides

SECTION 11) TOXICOLOGICAL INFORMATION**Likely Route of Exposure**

Inhalation, ingestion, skin absorption

Acute Toxicity

Based on available data, the classification criteria are not met.

LD50(Oral, Rat): 8,191mg/kg

LD50(Dermal, Rabbit): not available

LC50(Inhalation, Rat): >11mg/L 4h

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

Aspiration Hazard

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Based on available data, the classification criteria are not met.

Reproductive Toxicity

Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization

Based on available data, the classification criteria are not met.

Serious Eye Damage/Irritation

Causes serious eye irritation

Skin Corrosion/Irritation

Causes skin irritation

Specific Target Organ Toxicity - Repeated Exposure

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Based on available data, the classification criteria are not met.

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Harmful to aquatic life

LC50: 18-24mg/L (96h, Fish)

LC50: 112-150mg/L (48h, Daphnia)

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws.

SECTION 14) TRANSPORT INFORMATION

	Transport Canada Information	U.S. DOT Information	IMDG Information	IATA Information
UN number:	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Proper shipping name:	N/A	N/A	N/A	N/A
Hazard class:	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Packaging group:	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Hazardous substance (RQ):	No Data Available	No Data Available		
Marine Pollutant:	No Data Available	No Data Available	No Data Available	
Note / Special Provision:	No Data Available	No Data Available	No Data Available	No Data Available
Toxic-Inhalation Hazard:	No Data Available	No Data Available		

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0001119-40-0	DIMETHYL GLUTARATE	60%	DSL, TSCA, EU_EC_Inventory - European_EC_Inventory
0000106-65-0	DIMETHYL SUCCINATE	20%	DSL, TSCA, EU_EC_Inventory - European_EC_Inventory
0000627-93-0	DIMETHYL ADIPATE	20%	DSL, TSCA, EU_EC_Inventory - European_EC_Inventory

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANtmg or CANtppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Version 1.1:

Revision Date: Aug 09, 2019

Version 1.0:

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First Edition.

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