Safety Data Sheet (SDS)
International (GHS)

Revision date: 1/20/2022

SECTION 1: Identification

Product identifiers:

Product trade name: Kalama* Ocimene PQ
Company product number: OCIMENEPQ
Other means of identification: 32176

Recommended use of the chemical and restrictions on use:

Uses: Fragrance ingredient; Industrial applications.
Restrictions on use: None identified

Details of the supplier:

Manufacturer/Supplier:
Emerald Kalama Chemical Limited
Dans Road
Widnes, Cheshire WA8 0RF
United Kingdom
Telephone: +44 (0) 151 423 8000

For further information about this SDS: Email: product.compliance@emeraldmaterials.com

Emergency telephone number:

ChemTel (24 hours): 1-800-255-3924 (USA); +1-813-248-0585 (outside USA); 1-300-954-583 (Australia); 000-800-100-4086 (India).

SECTION 2: Hazard(s) identification

Classification of the substance or mixture:

Flammable Liquid, category 3, H226
Skin Irritation, category 2, H315
Skin sensitizer, category 1B, H317
Hazardous to the aquatic environment, Acute, category 1, H400
Hazardous to the aquatic environment, Chronic, category 1, H410

Label elements:

Hazard pictogram(s):

Signal word:
Warning

Hazard statements:
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use carbon dioxide, dry chemical, foam to extinguish.
P391 Collect spillage.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local, regional and international regulations.

Supplemental information: No Additional Information

Precautionary statements are listed according to the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Annex III. Regulations in individual countries/regions may determine which statements are required on the product label. See product label for specifics.

Other hazards: No Additional Information

See Section 11 for toxicological information.

SECTION 3: Composition/information on ingredients

Substance:

CAS-No.	Chemical Name	Weight%
See Notes	Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	90-<95
See Notes	Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	5-<10

Notes: OCIMENE PQ: Reaction mass of dipentene (CAS# 138-86-3, EC 205-341-0) and (Z)-3,7-dimethylocta-1,3,6,-triene (CAS# 3338-55-4, EC 222-081-3). ALLO-OCIMENE: Reaction mass of (E,E)-2,6-dimethylocta-2,4,6-triene (CAS# 3016-19-1) and (E,Z)-2,6-dimethylocta-2,4,6-triene (CAS# 7216-56-0); Alternative CAS# 673-84-7.

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

SECTION 4: First-aid measures

Description of first aid measures:

General: If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

Eye contact: Immediately flush eyes with plenty of clean water for an extended time, not less than fifteen (15) minutes. Flush longer if there is any indication of residual chemical in the eye. Ensure adequate flushing of the eyes by separating the eyelids with fingers and roll eyes in a circular motion. If eye irritation persists: Get medical advice/attention.

Skin contact: Immediately remove contaminated clothing and shoes. Wash the affected area with plenty of soap and water until no evidence of the chemical remains (at least 15-20 minutes). Launder clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Inhalation: If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER or doctor/physician if you feel unwell.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse out the mouth with water. Get medical attention immediately.

Protection of first aid responders: Wear proper personal protective clothing and equipment.

Most important symptoms and effects, both acute and delayed: Irritation. Pre-existing skin problems may be aggravated by prolonged or repeated contact. See section 11 for additional information.

Indication of any immediate medical attention and special treatment needed, if necessary: Treat symptomatically.

SECTION 5: Fire-fighting measures

Extinguishing media:

Suitable: Use water spray, ABC dry chemical, "alcohol" foam or CO2. Use water to keep fire-exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect emergency responders attempting to stop a leak. Water spray may be used to flush spills away from exposures and to dilute spills to nonflammable mixtures.

Unsuitable: Do not use direct water stream. May spread fire.

Special hazards arising From the chemical:

Unusual fire/explosion hazards: Issue warning: combustible liquid. Eliminate all ignition sources. Ventilate the area. If spill is large, be prepared to isolate the hazard area. Deny access to the spill area to persons who are not involved in the cleanup and/or who have not been properly trained in spill management of hazardous/flammable liquids. Vapors may explode if ignited in an enclosed area. Run off to sewer may cause a fire or explosion hazard. Protect product from flames of any kind; maintain proper clearance when using heat devices, etc. Closed container may rupture (due to build up in pressure) when exposed to extreme heat. Product may burn if an ignition source is present. Gives off volatile vapors that are heavier than air and may travel along the ground or may be moved by ventilation and ignited by flame, sparks, heaters, or other ignition sources at

distant locations (flashback potential).

Hazardous combustion products: Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See section 10 (Hazardous decomposition products) for additional information.

Special protective equipment and precautions for fire-fighters: Use water/water spray to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures and to dilute spills to non-combustible mixtures. Do not flush combustible liquids into sewer as a fire or vapor explosion hazard may result. Never direct a hose stream directly onto a burning flammable/combustible liquid. Solid or straight hose stream will cause fire to spread if directed onto a burning spill or into an open container of burning liquid. Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

See section 9 for additional information.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 for recommendations on the use of personal protective equipment. Eliminate ignition sources. Ventilate areas of spill. Personal Protective Equipment must be worn.

Environmental precautions: Do not flush liquid into public sewer, water systems or surface waters.

Methods and materials for containment and cleaning up: Contain by diking with sand, earth or other non-combustible material. Wear proper personal protective clothing and equipment. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal. Change contaminated clothing and launder before reuse.

SECTION 7: Handling and storage

Precautions for safe handling: As with any chemical product, use good laboratory/workplace procedures. Do not cut, puncture, or weld on or near the container. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Provide eyewash fountains and safety showers in the work area. Bond and ground all containers when transferring chemical. Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.). Use spark-proof tools and equipment. Vapors may travel to distant ignition sources.

Conditions for safe storage, including any incompatibilities: Store in combustible storage area and away from heat and open flame. Keep away from heat, sparks and open flames. Store under well-ventilated conditions. Keep container upright, when not in use, to prevent leakage. Avoid storing containers in direct sunlight as vapors may accumulate in the head space creating pressure. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use. Emptied container may contain residual vapors or liquid which may ignite or explode. Do not reuse empty container without commercial cleaning or reconditioning. Bond and ground all containers when transferring chemical. Shelf life: 24 months.

SECTION 8: Exposure controls / personal protection

Control parameters:

Occupational exposure limits (OEL):

Chemical Name	ACGIH - TWA/Ceiling	ACGIH - STEL
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	N/E	N/E
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	N/E	N/E

Chemical Name	Australia	New Zealand	Philippines	Singapore
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	N/E	N/E	N/E	N/E
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	N/E	N/E	N/E	N/E

Chemical Name	Japan ISHL	Japan JSOH	Taiwan	Malaysia
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	N/E	N/E	N/E	N/E
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	N/E	N/E	N/E	N/E

N/E=Not established (no exposure limits established for the listed substances for listed country/region/organization).

Exposure controls:

Appropriate engineering controls: Always provide effective general and, when necessary, local exhaust ventilation to draw

spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Eliminate ignition sources (e.g., sparks, static buildup, excessive heat, etc.).

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear eye protection.
Skin and body protection: Wear chemical resistant (impervious) gloves. Use good laboratory/workplace procedures including personal protective clothing: labcoat, safety glasses and protective gloves.
Respiratory protection: No Information
Further information: Eyewash fountains and safety showers are recommended in the work area.

SECTION 9: Physical and chemical properties

Form:	Liquid	**pH:**	Not Available
Appearance:	Colorless	**Relative density:**	0.806-0.811 (20°C)
Odor:	Characteristic	**Partition coefficient (n-octanol/water):**	5.5 (OECD 117)
Odor threshold:	Not Available	**% Volatile by weight:**	Not Available
Solubility in water:	8.73 mg/L @ 20°C (OECD 105)	**VOC:**	Not Available
Evaporation rate:	Not Available	**Boiling point °C:**	>177 °C
Vapor pressure:	150 Pa @ 20°C	**Boiling point °F:**	>351 °F
Vapor density:	Not Available	**Flash point:**	53-57 °C (128-135 °F) EU A.9 closed cup
Viscosity:	6 mm2/s @ 40°C	**Auto-ignition temperature:**	>216°C (>421°F)
Melting point/Freezing point:	-20 °C (-4 °F) @ 101.3 kPa	**Flammability (solid, gas):**	Not Applicable (liquid)
Oxidizing properties:	Not oxidizing	**Flammability or explosive limits:**	LFL/LEL: 0.7% (Dipentene)
Explosive properties:	Not explosive		UFL/UEL: 6.1% (Dipentene)
Decomposition temperature:	Not Available	**Surface tension:**	71.55 mN/m @ 20°C (OECD 115)

Other information: Amounts specified are typical and do not represent a specification.

SECTION 10: Stability and reactivity

Reactivity: None known.

Chemical stability: This product is stable.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Excessive heat and ignition sources.

Incompatible materials: Avoid contact with strong oxidizing agents.

Hazardous decomposition products: Carbon dioxide, carbon monoxide and hydrocarbons.

SECTION 11: Toxicological information

Information on likely routes of exposure:

General: Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure.

Eyes: May cause eye irritation.

Skin: May cause allergic skin reaction. Causes skin irritation.

Inhalation: High airborne concentrations of vapors resulting from heating, misting or spraying may cause irritation of the respiratory tract and mucous membranes.

Ingestion: Ingestion may cause irritation.

Acute toxicity information: Not classified (based on available data, the classification criteria are not met).

Chemical Name	Inhalation LC50	Species	Oral LD50	Species	Dermal LD50	Species
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	N/E	N/E	>2000 mg/kg (OECD 423)	Rat/ adult female	N/E	N/E
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	N/E	N/E	1900 mg/kg (similar materials)	Rat/ adult	2400 mg/kg (similar materials)	Rabbit/ adult

Skin corrosion/irritation: Causes skin irritation - Category 2.

Chemical Name	Skin irritation	Species
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Irritant (OECD 431 & 439)	In-Vitro
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Irritant	Similar materials

Serious eye damage/irritation: Not classified (based on available data, the classification criteria are not met).

Chemical Name	Eye irritation	Species
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Non-irritant (OECD 438)	In-Vitro
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Non-irritant (OECD 492)	Similar materials

Respiratory or skin sensitization: Skin sensitization - Category 1B.

Chemical Name	Skin sensitisation	Species
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Sensitizer	Mouse/Local lymph node assay
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Sensitizer (read-across)	Similar material(s)

Carcinogenicity: Not classified (no relevant information found).

Germ cell mutagenicity: Not classified (based on available data, the classification criteria are not met). OCIMENE PQ: In vitro testing showed no mutagenic activity (OECD 471, OECD 487, OECD 490).

Reproductive toxicity: Not classified (based on available data, the classification criteria are not met). OCIMENE PQ: Reproductive toxicity, oral study in rats: NOAEL (no-observed adverse-effect-level) 175 mg/kg bw/day (female), 500 mg/kg bw/day (male) (OECD 422). Developmental toxicity oral study, rats: NOAEL, developmental toxicity=175 mg/kg bw/day (OECD 422).

Specific target organ toxicity (STOT) - single exposure: Not classified (based on available data, the classification criteria are not met).

Specific target organ toxicity (STOT) - repeated exposure: Not classified (based on available data, the classification criteria are not met). OCIMENE PQ: Repeated dose study, oral, rats (OECD 422): NOAEL (no-observed-adverse-effect-level)=175 mg/kg bw/day (systemic effects); 60 mg/kg bw/day (local effects).

Aspiration hazard: Not classified (no relevant information found).

Other toxicity information: No additional information available.

SECTION 12: Ecological information

Ecotoxicity:

Chemical Name	Species	Acute	Acute	Chronic
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Fish	LC50 0.785 mg/L (96 hours) (geometric mean measured)	N/E	N/E
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Invertebrates	EC50 0.312 mg/L (48 hours) (geometric mean measured)	N/E	N/E
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Algae	EC50 0.225 mg/L (72 hours) (geometric mean measured)	N/E	EC10 0.199 mg/L(72 hours) (geometric mean measured)
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Micro-organisms	EL50 >1000 mg/L (3 hours) (OECD 209)		
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Fish	N/E	N/E	N/E
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Invertebrates	EC50 >0.33-<1 mg/L (48 hours) (similar materials)	N/E	N/E
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Algae	EC50 0.97 mg/L (72 hours) (calculated)	N/E	N/E

Persistence and degradability:

Chemical Name	Biodegradation

Chemical Name	Biodegradation
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Inherently biodegradable (OECD 301F)
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Not readily biodegradable (OECD 301D)

Bioaccumulative potential:

Chemical Name	Bioconcentration Factor (BCF)	Log Kow
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	426-890 L/kg (calculated)	5.5 (OECD 117)
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	N/E	4.71 (calculated)

Mobility in soil:

Chemical Name	Mobility in soil (Koc/Kow)
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	2398 @ 20°C (OECD 121)
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	N/E

Other adverse effects: No additional information available.

SECTION 13: Disposal considerations

Dispose of unused contents (incineration) in accordance with national and local regulations. Dispose of container in accordance with national and local regulations. Ensure the use of properly authorized waste management companies, where appropriate.

See Section 8 for recommendations on the use of personal protective equipment.

SECTION 14: Transport information

The information below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions.
UN number: UN3295

UN proper shipping name:

Hydrocarbons, liquid, n.o.s. (Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene)

Transport hazard class(es):

U.S. DOT hazard class: 3
Canada TDG hazard class: 3
Europe ADR/RID hazard class: 3
IMDG Code (ocean) hazard class: 3
ICAO/IATA (air) hazard class: 3

A "N/A" listing for the hazard class indicates the product is not regulated for transport by that regulation.

Packing group: III

Environmental hazards:

Marine pollutant: Marine Pollutant: Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene.
Hazardous substance (USA): Not Applicable

Special precautions for user: Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:

Not Applicable

Notes: For surface shipment within the United States, flammable liquids with a flash point of 100-141 F (38-60 C) may be reclassified: In containers of 119 gallons capacity or less: NOT REGULATED. In containers of more than 119 gallons capacity: COMBUSTIBLE LIQUID.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question:

Japan regulations:

Japan Industrial Safety and Health Law:

Chemical name	Category
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Dangerous Substance

Japan Fire Service Law:

Chemical name	Category
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Group 4 - Flammable liquids
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Group 4 - Flammable liquids

Japan Poisonous and Deleterious Substances:

Chemical name	Category	Threshold
No subject chemicals		

Japan Prevention of Marine Pollution and Disaster:

Chemical name	Category
Reaction mass of dipentene and (Z)-3,7-dimethylocta-1,3,6,-triene	Nonbulk shipment, Noxious Category Y
Reaction Mass of (E,E)-2,6-dimethylocta-2,4,6-triene and (E,Z)-2,6-dimethylocta-2,4,6-triene (Allo-Ocimene)	Noxious Category Y

Japan Chemical Substances Control Law:

Chemical name	Category	Notes
No subject chemicals		

Other regulations: No Additional Information

Chemical inventories:

Regulation	Status
Australian Inventory of Industrial Chemicals (AIIC):	Y
Canadian Domestic Substances List (DSL):	Y
Canadian Non-Domestic Substances List (NDSL):	N
China Inventory of Existing Chemical Substances (IECSC):	Y
European EC Inventory (EINECS, ELINCS, NLP):	Y
Japan Existing and New Chemical Substances (ENCS):	Y
Japan Industrial Safety and Health Law (ISHL):	Y
Korean Existing and Evaluated Chemical Substances (KECL):	Y
New Zealand Inventory of Chemicals (NZIoC):	N
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	Y
Taiwan Inventory of Existing Chemicals:	Y
U.S. Toxic Substances Control Act (TSCA) (Active):	Y

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory (or is not on the ACTIVE inventory for U.S. TSCA); 2) no information is available; or 3) the component has not been reviewed. A "Y" for New Zealand may mean that a qualified group standard may exist for the components in this product.

Chemical inventory notes: ALLO-OCIMENE: Alternative CAS# 673-84-7. OCIMENE PQ: Alternative CAS# 3338-55-4 & CAS# 138-86-3. New Zealand: One or more components may be covered by a group standard.

Europe REACH (EC) 1907/2006: Applicable components are registered, exempt or otherwise compliant. EU REACH is only relevant to substances either manufactured or imported into the EU. Emerald Kalama Chemical has met its obligations under the EU REACH regulation. EU REACH information regarding this product is provided for informational purposes only. Each Legal Entity may have differing EU REACH obligations, depending on their place in the supply chain. Emerald's compliance with EU REACH does not imply automatic coverage for Downstream Users located in the EU. For material manufactured outside of the EU, the importer of record must understand and meet their specific obligations under the regulation.

SECTION 16: Other information

Legend:
* : Trademark owned by Emerald Kalama Chemical, LLC.
ACGIH: American Conference of Governmental Industrial Hygienists
N/A: Not Applicable
N/E: None Established
STEL: Short Term Exposure Limit
TWA: Time Weighted Average (exposure for 8-hour workday)

Users Responsibility/Disclaimer of Liability:
The information set forth herein is based on our current knowledge, and is intended to describe the product solely with respect to health, safety and the environment. As such, it must not be interpreted as a guarantee of any specific property of the product. As a result, the customer shall be solely responsible for deciding whether said information is suitable and beneficial.

Safety Data Sheet Preparer:
Product Compliance Department

Emerald Kalama Chemical, LLC
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Vancouver, WA 98683
United States