SAFETY DATA SHEET

Gojira Fine Chemicals Revision date 08-Jan-2019 Version 1.2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier Product Name

Product Name Product Code Ethyltriphenylphosphonium acetate EA1002

Recommended use of the chemical and restrictions on use For research use only. Not intended for diagnostic or therapeutic use.

Details of the supplier of the safety data sheet Gojira Fine Chemicals

5386 Majestic Pkwy, Ste. 7 Bedford Heights, OH 44146 440-252-5397 888-211-5523 docsupport@gojirafc.com Emergency telephone number ChemTel 1.800.255.3924 (Within USA)

2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification

Acute toxicity - Oral Acute toxicity - Dermal Acute toxicity - Inhalation (Dusts/Mists) Serious eye damage/eye irritation Specific target organ toxicity (single exposure) Flammable liquids

Label elements

Signal word Hazard statements

Symbols/Pictograms

Precautionary Statements - Prevention

Category 2 Category 3 Category 2 Category 2A Category 1 Category 2

Danger Fatal if swallowed Toxic in contact with skin Fatal if inhaled Causes serious eye irritation Causes damage to organs Highly flammable liquid and vapor



Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Wear respiratory protection Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment



Precautionary Statements - Response Precautionary Statements - Storage Precautionary Statements - Disposal	Use only non-sparking tools Take precautionary measures against static discharge Keep cool IF exposed: Call a POISON CENTER or doctor/physician IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention Call a POISON CENTER or doctor/physician if you feel unwell Wash contaminated clothing before reuse IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Rinse mouth In case of fire: Use CO2, dry chemical, or foam for extinction Store locked up Store in a well-ventilated place. Keep container tightly closed Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC) Hazards not otherwise classified (HNOC)	Not applicable

Other Information

NFPA	Health hazards	2	
	Flammability	3	
	Stability	0	
	Physical and chemical	-	
	properties		\checkmark

HMIS

Health hazards	2
Flammability	3
Physical hazards	1
Personal protection	-

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No	35835-94-0
Molecular Weight	350.40
Formula	C22H23O2P

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Ethyltriphenylphosphonium acetate	35835-94-0	70 - 90	-	-	-
Methanol	67-56-1	15 - 40	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit) = 15800 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h = 64000 ppm (Rat) 4 h

4. FIRST AID MEASURES

First Aid Measures General advice

Eye contact

Skin Contact Inhalation

Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.

Wash off immediately with plenty of water.

Immediate medical attention is required Remove to fresh air If not breathing, give artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation



Ingestion Self-protection of the first aider	Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Remove all sources of ignition.
Most important symptoms and e	effects, both acute and delayed
Symptoms	No information available.
Indication of any immediate me	dical attention and special treatment needed
Note to physicians	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media	No information available.
Specific hazards arising from th	e chemical
Specific hazards arising from the chemical	No information available.
Hazardous combustion products	Carbon oxides.
Explosion data	
Sensitivity to Mechanical Impact Sensitivity to Static Discharge	No information available. No information available.
Sensitivity to Static Discharge	

Protective equipment and precautions for firefighters

Protective equipment and precautions Wear self-contained breathing apparatus and protective suit. for firefighters

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective Personal precautions	e equipment and emergency procedures Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.	
Environmental precautions Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.	
Methods for cleaning up	Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.



Conditions for safe storage, including any incompatibilities

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Storage Conditions	Keep tightly closed in a dry and cool p
	room temperature

Incompatible materials

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Store at room temperature. None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methanol	STEL: 250 ppm	TWA: 200 ppm	IDLH: 6000 ppm
67-56-1	TWA: 200 ppm	TWA: 260 mg/m ³	TWA: 200 ppm
	S*	(vacated) TWA: 200 ppm	TWA: 260 mg/m ³
		(vacated) TWA: 260 mg/m ³	STEL: 250 ppm
		(vacated) STEL: 250 ppm	STEL: 325 mg/m ³
		(vacated) STEL: 325 mg/m ³	_
		(vacated) S*	

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles.
Skin and Body Protection	Wear protective gloves and protective clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General Hygiene Considerations	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	liquid
Appearance	No information available
Odor	No information available
Property	Values
pH	No information available
Melting point/freezing point	No information available
Boiling point	64.7 °C
Flash point	-17 °C
Liquid Density	No information available
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available



Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Explosive properties Oxidizing properties

No information available No information available

10. STABILITY AND REACTIVITY

Reactivity Not applicable Chemical stability Stable under recommended storage conditions. Possibility of Hazardous Reactions None under normal processing. Hazardous polymerization No information available. Conditions to avoid Heat, flames and sparks. Incompatible materials Strong oxidizing agents. Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure				
Inhalation	No data available.			
Eye contact	No data available.			
Skin Contact	No data available.			
Ingestion	No data available.			

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Prolonged or repeated exposure increases the risk. Possible risk of irreversible effects. **Target Organ Effects** Gastrointestinal tract (GI), Central nervous system, Eyes, Respiratory system, Skin.

Numerical measures of toxicity - Product Information

No information available Unknown acute toxicity The following values are calculated based on chapter 3.1 of the GHS document ATEmix (oral) 7 mg/kg ATEmix (dermal) 1000 mg/kg ATEmix (inhalation-dust/mist) 0.1 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

May cause long lasting harmful effects to aquatic life

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Methanol	-	28200: 96 h Pimephales	-	-
67-56-1		promelas mg/L LC50		
		flow-through 100: 96 h		
		Pimephales promelas mg/L		
		LC50 static 13500 - 17600:		
		96 h Lepomis macrochirus		
		mg/L LC50 flow-through 18 -		
		20: 96 h Oncorhynchus		
		mykiss mL/L LC50 static		
		19500 - 20700: 96 h		



	Oncorhynchus mykiss mg/L LC50 flow-through				
70% of the mixture consists of companents(a) of unknown bezards to the equatic environment					

70% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Persistence and degradability Bioaccumulation Mobility No information available. No information available. No information available.

Chemical name	Partition coefficient
Methanol	-0.77
67-56-1	

13. DISPOSAL CONSIDERATIONS

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.
US EPA Waste Number	U154
California Hazardous Waste Status	This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Methanol	Toxic
67-56-1	Ignitable

14. TRANSPORT INFORMATION

DOT UN/ID no Hazard Class Packing Group Proper shipping name Description Emergency Response Guide Number	UN1993 3 II Flammable liquids, n.o.s. UN1993, Flammable liquids, n.o.s. (Methanol), 3, II 128
IMDG UN/ID no Hazard Class Packing Group Proper shipping name Description Special Provisions EmS-No	UN1993 3 II Flammable liquid, n.o.s. UN1993, Flammable liquid, n.o.s. (Methanol), 3, II, (-17°C c.c.) 274 F-E, S-E
IATA UN/ID no Hazard Class Packing Group Proper shipping name Description	UN1993 3 II Flammable liquid, n.o.s. UN1993, Flammable liquid, n.o.s. (Methanol), 3, II

15. REGULATORY INFORMATION



International Inventories

All of the components in the product are on the following Inventory lists

TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC) ENCS (Japan):

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Ethyltriphenylphosphonium	Х	Х	-	Х	-	Х	Х	Х	-	Х
acetate										
Methanol	Х	Х	-	Х	-	Х	Х	Х	Х	Х

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65	
Methanol - 67-56-1	Developmental	

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Methanol	Х	Х	Х
67-56-1			

16. OTHER INFORMATION

Revision note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet