SAFETY DATA SHEET



CITGO SUPERGARD® Sea and Snow™ 2-Cycle **Engine Oil**

Section 1. Identification

GHS product identifier

: CITGO SUPERGARD® Sea and Snow™ 2-Cycle Engine Oil

Synonyms

: Two cycle engine oil;

CITGO® Material Code: 621612001

: 621612001 Code MSDS# : 621612001

Supplier's details

: CITGO Petroleum Corporation

P.O. Box 4689 Houston, TX 77210 sdsvend@citgo.com

Emergency telephone number (with hours of

operation)

: Technical Contact: (800) 248-4684 Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300

(United States Only)

Section 2. Hazards identification

OSHA/HCS status

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

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4 AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Signal word : Warning

: Combustible liquid. **Hazard statements**

Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Keep away from flames and hot

surfaces. - No smoking. Avoid release to the environment.

: Not applicable. Response

: Store in a well-ventilated place. Keep cool. **Storage**

Dispose of contents and container in accordance with all local, regional, national and **Disposal**

international regulations.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

Two cycle engine oil;

CITGO® Material Code: 621612001

CAS number/other identifiers

CAS number Not applicable.

Ingredient name	%	CAS number
Distillates (petroleum), solvent-refined heavy paraffinic Distillates (petroleum), hydrotreated light	≥25 - ≤50 ≤5	64741-88-4 64742-47-8

Section 3. Composition/information on ingredients

Any concentration shown as a range is to protect confidentiality or is due to process variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar,

tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean

shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless

directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain

an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: Treat symptomatically and supportively.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may

be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 2/12

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use caution when applying carbon dioxide in confined spaces. SMALL FIRE: Steam, CO₂, dry chemical or inert gas (e.g., nitrogen). LARGE FIRE: Use foam, water fog or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent

Unsuitable extinguishing media

: Do not use water jet.

excessive pressure, ignition or explosion.

Specific hazards arising from the chemical

: Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 3/12

Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Head spaces in tanks and other containers may contain a mixture of air and vapor in the flammable range. Vapor may be ignited by static discharge. Storage area must meet OSHA requirements and applicable fire codes. Additional information regarding the design and control of hazards associated with the handling and storage of flammable and combustible liquids may be found in professional and industrial documents including, but not limited to, the National Fire Protection Association (NFPA) publications NFPA 30 ("Flammable and Combustible Liquid Code"), NFPA 77 ("Recommended Practice on Static Electricity") and the American Petroleum Institute (API) Recommended Practice 2003, ("Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents").

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 4/12

Distillates (petroleum), hydrotreated light

Section 8. Exposure controls/personal protection

Distillates (petroleum), solvent-refined heavy paraffinic

ACGIH TLV (United States, 3/2017).

TWA: 5 mg/m³ 8 hours. Form: Inhalable

fraction

NIOSH REL (United States, 10/2016). TWA: 5 mg/m³ 10 hours. Form: Mist

STEL: 10 mg/m³ 15 minutes. Form: Mist OSHA PEL (United States, 6/2016).

TWA: 5 mg/m³ 8 hours.

ACGIH TLV (United States, 3/2017).

Absorbed through skin.

TWA: 200 mg/m³, (as total hydrocarbon

vapor) 8 hours.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

: Avoid skin contact with liquid. Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Leather gloves are not protective for liquid contact.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Avoid skin contact with liquid. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Leather boots are not protective for liquid contact.

Respiratory protection

: Avoid inhalation of gases, vapors, mists or dusts. Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 5/12

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Purple.

Odor : Mild petroleum odor

pH : Not available.Boiling point : Not available.

Flash point : Closed cup: 85°C (185°F) [Pensky-Martens (ASTM D-93)]

Open cup: 95°C (203°F) [Cleveland.]

Evaporation rate : <1 (n-butyl acetate. = 1)

Lower and upper explosive

(flammable) limits

: Lower: 1% Upper: 7%

Vapor pressure

: <0.013 kPa (<0.1 mm Hg) [room temperature]

Vapor density : >1 [Air = 1]

Relative density : 0.86

Density Ibs/gal : Estimated 7.17 lbs/gal

Density gm/cm³ : Not available.

Gravity, °API : Estimated 33 @ 60 F

Solubility : Insoluble in the following materials: cold water.

Flow time (ISO 2431) : Not available.

Viscosity : Kinematic (room temperature): 0.55 cm²/s (55 cSt)

Section 10. Stability and reactivity

Reactivity : Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide

under US GHS Definition(s).

Chemical stability: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not

allow vapor to accumulate in low or confined areas.

Incompatible materials: Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-refined heavy paraffinic	LD50 Dermal	Rabbit	2000 mg/kg	-
·	LD50 Oral	Rat	5000 mg/kg	-
Distillates (petroleum), hydrotreated light	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary :

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 6/12

Section 11. Toxicological information

Distillates (petroleum), solvent-refined heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Irritation/Corrosion

Not available.

Skin : No additional information.Eyes : No additional information.Respiratory : No additional information.

Sensitization

Not available.

Oleim

Skin: No additional information.Respiratory: No additional information.

Mutagenicity
Not available.

Conclusion/Summary: No additional information.

Carcinogenicity

Not available.

Conclusion/Summary : Distillates (petroleum), solvent-refined heavy paraffinic: In long term studies (up to

two years) no carcinogenic effects have been reported in any animal species tested.

Classification

Product/ingredient name	OSHA	IARC	NTP
Distillates (petroleum), solvent-refined heavy paraffinic	-	4	-

Reproductive toxicity

Not available.

Conclusion/Summary

: No additional information.

Teratogenicity
Not available.

Conclusion/Summary: No additional information.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Distillates (petroleum), hydrotreated light	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Routes of entry anticipated: Dermal, Inhalation.

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 7/12

Section 11. Toxicological information

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 2200 µg/l Fresh water	Fish - Lepomis macrochirus	4 days
	Acute LC50 2600 μg/l Fresh water Acute LC50 2900 μg/l Fresh water	Fish - Oncorhynchus mykiss Fish - Oncorhynchus mykiss	4 days 96 hours

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary: Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene): This product is unlikely to biodegrade at a significant rate.

Bioaccumulative potential

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 8/12

Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
Distillates (petroleum), solvent-refined heavy paraffinic	3.9 to 6	-	high

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification

: D018

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN 1268	Not available.	Not available.
UN proper shipping name	UN1268, Petroleum Distillates, n. o.s., Combustible Liquid, PG III [This product has a flash point temperature between 60.5° to 93°C (141° and 200°F). Bulk shipments of this product are regulated.] (Distillates (petroleum), hydrotreated light)	Not available.	Not available.
Transport hazard class(es)	Combustible liquid.	Not available.	Not available.
Packing group	III	-	-
Environmental hazards	No.	No.	No.

Additional information

DOT Classification

: Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials.

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 9/12

Section 14. Transport information

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code

: Not available.

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: benzene; toluene; naphthalene; ethylbenzene Clean Water Act (CWA) 311: benzene; toluene; naphthalene; ethylbenzene; xylene This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients **SARA 304 RQ** : Not applicable.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 4

Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), hydrotreated light		FLAMMABLE LIQUIDS - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1

State regulations

Massachusetts : None of the components are listed.

New York : The following components are listed: Butene, homopolymer (products derived from

either/or But-1-ene/But-2-ene)

New Jersey : None of the components are listed.

Pennsylvania : The following components are listed: Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene); ETHENE, TETRAFLUORO-, HOMOPOLYMER

California Prop. 65 Clear and Reasonable Warnings (2018)



MARNING: This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Ethylbenzene, Naphthalene, which are known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca. gov.

International regulations

Inventory list

United States : All components are listed or exempted.

Australia : Not determined.

Canada : All components are listed or exempted.

China : Not determined. **Europe** Not determined.

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version :1 10/12

Section 15. Regulatory information

Japan : Japan inventory (ENCS): Not determined.

Japan inventory (ISHL): Not determined.

Malaysia : Not determined. **New Zealand** Not determined. **Philippines** : Not determined. Republic of Korea : Not determined. **Taiwan** : Not determined. **Thailand** : Not determined. **Turkey** : Not determined. **Viet Nam** : Not determined.

Section 16. Other information

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
AQUATIC HAZARD (ACUTE) - Category 3	On basis of test data Calculation method Calculation method

History

Date of printing : 12/7/2018

Date of issue/Date of : 12/7/2018

revision

Date of previous issue

: No previous validation

Version : 1

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 11/12

Section 16. Other information

THE INFORMATION IN THIS SAFETY DATA SHEET (SDS) WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS OR ACCURACY. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS SDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS SDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE OR APPLICATION.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND/OR DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR ANY LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

CITGO is a registered trademark of CITGO Petroleum Corporation

Date of issue/Date of revision : 12/7/2018 Date of previous issue : No previous validation Version : 1 12/12