SAFETY DATA SHEET

Clarion FM Spray Grease



Section 1. Identification

GHS product identifier

: Clarion FM Spray Grease

Synonyms

: Lubricating grease aerosol.

Material uses

: Incidental food contact lubricant.

Code

: 633594009

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 (M-F, 8 AM to 4 PM)

Medical Emergency: (832) 486-4700 (24 Hr) CHEMTREC Emergency: (800) 424-9300 (24 Hr)

(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 AEROSOLS - Category 1

GASES UNDER PRESSURE - Compressed gas

SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms







Signal word

: Danger

Hazard statements

: Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes skin irritation.

May cause an allergic skin reaction.

Precautionary statements

Prevention

: Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Pressurized container: Do not pierce or burn, even after use.

Response

: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.

Storage

: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise

classified

: None known.

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 1/13

Section 3. Composition/information on ingredients

Substance/mixture

: Substance

Other means of identification

: Lubricating grease aerosol.

CAS number/other identifiers

CAS number : Not available.

Ingredient name	%	CAS number
Naphtha (petroleum), hydrotreated light	15 - 40	64742-49-0
Propane	10 - 30	74-98-6
Butane	3 - 7	106-97-8
zinc oxide	1 - 5	1314-13-2
Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates	0.1 - 1	80939-62-4
1H-Benzotriazole-1-methanamine, N,N-bis(2-ethylhexyl)-ar-methyl-	0.1 - 1	94270-86-7

^{* =} Various ** = Mixture *** = Proprietary

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.

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

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. 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 : No known significant effects or critical hazards.

Inhalation : Breathing high concentrations can cause irregular heartbeats which can be fatal.

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

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 2/13

Section 4. First aid measures

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation: Breathing high concentrations can cause irregular heartbeats which may be fatal.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

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

Notes to physician : This material (or a component) may sensitize the heart to the effects of

sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate

cardiac arrthymias in individuals exposed to this material.

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

: None known.

Specific hazards arising from the chemical

Extremely flammable aerosol. 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. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide phosphorus oxides metal oxide/oxides

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. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. 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

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 3/13

Section 6. Accidental release measures

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 nonemergency 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).

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.

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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 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. Protect from sunlight. Eliminate all ignition sources. 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.

Date of issue/Date of revision : 11/12/2019 Date of previous issue :11/12/2019 Version :3 4/13

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Naphtha (petroleum), hydrotreated light

Propane

Butane

zinc oxide

ACGIH TLV (United States).

TWA: 300 ppm 8 hours.

NIOSH REL (United States, 10/2016).

TWA: 1000 ppm 10 hours. TWA: 1800 mg/m³ 10 hours.

OSHA PEL (United States, 5/2018).

TWA: 1000 ppm 8 hours. TWA: 1800 mg/m³ 8 hours.

ACGIH TLV (United States, 3/2018). Oxygen

Depletion [Asphyxiant].

ACGIH TLV (United States).

TWA: 800 ppm 8 hours.

NIOSH REL (United States, 10/2013).

TWA: 800 ppm 10 hours. TWA: 1900 mg/m³ 10 hours. ACGIH TLV (United States, 3/2015).

STEL: 1000 ppm 15 minutes.

NIOSH REL (United States, 10/2016).

CEIL: 15 mg/m³ Form: Dust

TWA: 5 mg/m³ 10 hours. Form: Dust and

fumes

STEL: 10 mg/m³ 15 minutes. Form: Fume

OSHA PEL (United States, 5/2018).
TWA: 5 mg/m³ 8 hours. Form: Fume
TWA: 5 mg/m³ 8 hours. Form: Respirable

fraction

TWA: 15 mg/m³ 8 hours. Form: Total dust

ACGIH TLV (United States).

TWA: 2 mg/m³ 8 hours. Form: Respirable STEL: 10 mg/m³ 15 minutes. Form:

Respirable

ACGIH TLV (United States, 3/2018).

TWA: 2 mg/m³ 8 hours. Form: Respirable

fraction

STEL: 10 mg/m³ 15 minutes. Form:

Respirable fraction

OSHA PEL (United States). Notes:

Respirable

TWA: 5 mg/m³ 8 hours. Form: Respirable

dust

OSHA PEL (United States). Notes: Total

TWA: 15 mg/m³ 8 hours. Form: Total dust

Appropriate engineering controls

Environmental exposure controls

- : The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- : 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 5/13

Section 8. Exposure controls/personal protection

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

: Avoid skin contact with liquid. 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.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : cream-colored grease Odor Mild solvent odor. : Not available. pН **Boiling point** : Not available. Flash point : Not available. Lower and upper explosive : Not available.

(flammable) limits

Vapor pressure : Not available. Vapor density : Not available.

Relative density

Density lbs/gal : Estimated 6 lbs/gal Density gm/cm³ : Not available.

Gravity, °API : Estimated 65 @ 60 F

Flow time (ISO 2431) : Not available.

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.

Date of issue/Date of revision : 11/12/2019 :11/12/2019 Version :3 6/13 Date of previous issue

Section 10. Stability and reactivity

Conditions to avoid

: Avoid all possible sources of ignition (spark or flame).

Incompatible materials

: No specific data.

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
Butane	LC50 Inhalation Gas. LC50 Inhalation Vapor LC50 Inhalation Vapor	Mouse	680000 mg/m ³	15 minutes 2 hours 4 hours

Conclusion/Summary

: White mineral oil (petroleum): Low-viscosity and High-viscosity White Mineral Oils: ^[

25,45,50,70]

DRAIZE EYE, Acute: Non-irritating [Rabbit].
DRAIZE DERMAL, Acute: Non-irritating [Rabbit].
BUEHLER, Acute: Non-sensitizing [Guinea Pig].
28-Day DERMAL, Sub-Chronic: Non-irritating [Rabbit].

104-Week DERMAL, Chronic: No skin tumors at site of application [Mouse].

MUTAGENICITY:

Modified Ames Assay: Negative [Salmonella typhimurium]. in-vitro Lymphoma Assay: Negative or no toxicity [Mouse].

Lifetime mouse skin painting studies indicated that white mineral oils are not mutagenic or carcinogenic. 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. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

propane: Studies in laboratory animals indicate exposure to extremely high levels of propane (1 to 10 vol.% in air) may cause cardiac arrhythmias (irregular heartbeats) which may be serious or fatal.

n-Butane: A n-butane exposure of 5,000 ppm in air has been shown to affect the heart in dogs, causing lower contractile force and other effects. Also, butane may decrease the myocardial threshold to epinephrine-induced arrhythimias.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
zinc oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Skin

: Naphtha (petroleum), hydrotreated light: May cause skin irritation.

Eyes

: Naphtha (petroleum), hydrotreated light: May cause eye irritation.

Respiratory

: Naphtha (petroleum), hydrotreated light: May cause respiratory irritation.

<u>Sensitization</u>

Not available.

Skin : No additional information.

Respiratory : No additional information.

Mutagenicity

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 7/13

Section 11. Toxicological information

Not available.

Conclusion/Summary: No additional information.

Carcinogenicity

Not available.

Conclusion/Summary: No additional information.

Reproductive toxicity

Not available.

Conclusion/Summary: No additional information.

Teratogenicity
Not available.

Conclusion/Summary: No additional information.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

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

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact: No known significant effects or critical hazards.

Inhalation : Breathing high concentrations can cause irregular heartbeats which can be fatal.

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

Ingestion: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering

redness

Inhalation : Breathing high concentrations can cause irregular heartbeats which may be fatal.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects

: Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 8/13

Section 11. Toxicological information

Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to

very low levels.

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
zinc oxide	Acute IC50 1.85 mg/l Marine water Acute IC50 46 μg/l Fresh water	Algae - Skeletonema costatum Algae - Pseudokirchneriella subcapitata - Exponential growth phase	96 hours 72 hours
	Acute LC50 98 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	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

Product/ingredient name	LogPow	BCF	Potential
Naphtha (petroleum), hydrotreated light	2.2 to 5.2	10 to 2500	high
Propane	1.09	-	low
Butane	2.89	-	low
zinc oxide	-	60960	high

Mobility in soil

Soil/water partition coefficient (Koc)

Other adverse effects

: Not available.

: 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

Date of issue/Date of revision : 11/12/2019 Date of previous issue :11/12/2019 Version :3 9/13

Section 13. Disposal considerations

cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN1950	UN1950	UN1950
UN proper shipping name	Aerosols, flammable (propane, n-Butane)	Aerosols, flammable (Naphtha (petroleum), hydrotreated light, propane)	Aerosols, flammable (Naphtha (petroleum), hydrotreated light, propane)
Transport hazard class(es)	2.1	2.1	2.1
Packing group	-	-	-
Environmental hazards	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

TDG Classification

: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.

Mexico Classification

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

ADR/RID

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1. 4 to 4.1.1.8.

IMDG IATA

- : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
- : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Quantity limitation Passenger and Cargo Aircraft: 75 kg. Cargo Aircraft Only: 150 kg. Limited Quantities - Passenger Aircraft: 30 kg.

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: zinc oxide

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.

Clean Air Act (CAA) 112 regulated flammable substances: propane; n-Butane

Date of issue/Date of revision : 11/12/2019 Date of previous issue :11/12/2019 Version :3 10/13

Section 15. Regulatory information

SARA 302/304

Composition/information on ingredients

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : FLAMMABLE AEROSOLS - Category 1

GASES UNDER PRESSURE - Compressed gas

SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1

Composition/information on ingredients

Name	%	Classification
Naphtha (petroleum),	15 - 40	FLAMMABLE LIQUIDS - Category 3
hydrotreated light		GERM CELL MUTAGENICITY - Category 1B
		CARCINOGENICITY - Category 1B
		ASPIRATION HAZARD - Category 1
Propane	10 - 30	FLAMMABLE GASES - Category 1
		GASES UNDER PRESSURE - Compressed gas
		SIMPLE ASPHYXIANTS
Butane	3 - 7	FLAMMABLE GASES - Category 1
		GASES UNDER PRESSURE - Compressed gas
zinc oxide	1 - 5	EYE IRRITATION - Category 2A
Amines, C11-14-branched alkyl,	0.1 - 1	SKIN IRRITATION - Category 2
monohexyl and dihexyl		EYE IRRITATION - Category 2A
phosphates		

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	zinc oxide	1314-13-2	<3
Supplier notification	zinc oxide	1314-13-2	<3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: PROPANE; n-Butane; ZINC OXIDE FUME

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

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

New Jersey : The following components are listed: PROPANE; n-Butane; ZINC OXIDE; CALCIUM

CARBONATE; LIMESTONE

Pennsylvania : The following components are listed: PROPANE; n-Butane; Butene, homopolymer

(products derived from either/or But-1-ene/But-2-ene); ZINC OXIDE; ZINC OXIDE

FUME

International regulations

Inventory list

United States : All components are listed or exempted.Australia : All components are listed or exempted.

Canada : At least one component is not listed in DSL but all such components are listed in NDSL.

China : Not determined.

Europe : Not determined.

Japan : Japan inventory (ENCS): Not determined.

Japan inventory (ISHL): Not determined.

Malaysia : Not determined.

New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : Not determined.

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 11/13

Section 15. Regulatory information

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
	Expert judgment On basis of test data
	Expert judgment Expert judgment

History

Date of printing : 11/12/2019

Date of issue/Date of : 11/12/2019

revision

Date of previous issue : 11/12/2019

Version : 3

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

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.

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 12/13

Section 16. Other information

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.

Clarion is a registered trademark of CITGO Petroleum Corporation

Date of issue/Date of revision : 11/12/2019 Date of previous issue : 11/12/2019 Version : 3 13/13