SAFETY DATA SHEET

SUNOCO DXP



Section 1. Identification

GHS product identifier

: SUNOCO DXP

Other means of identification

: Leaded racing gasoline

Product code

: 19009570

Product use

: Leaded racing gasoline

For use in competition racing vehicles. Not to be used for any other purpose.

Supplier's details

: Sunoco LP

3801 West Chester Pike

Newtown Square, Pennsylvania 19073

Sunoco Race Fuels email: performanceproducts@sunoco.com

http://www.sunocoracefuels.com

e-mail address of person responsible for this SDS

: sunocomsds@sunoco.com

Emergency telephone

: Sunoco LP: (800) 964-8861

number (with hours of

Chemtrec: 1-800-424-9300 (Available 24 hours/7 days per week)

operation)

Product Safety Information: 1-888-567-3066

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 2 SKIN IRRITATION - Category 2

CARCINOGENICITY - Category 1B

TOXIC TO REPRODUCTION - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms







Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapor.

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause drowsiness or dizziness.

May cause cancer.

May damage fertility or the unborn child.

May cause damage to organs through prolonged or repeated exposure. (cardiovascular

system, central nervous system (CNS), kidneys, liver, respiratory system)

Precautionary statements

1/17 Date of issue/Date of revision : 09/01/2023 : 09/01/2023 Version :1 Date of previous issue

Section 2. Hazards identification

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling.

Response

: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention.

Storage

: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep

Disposal

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

Hazards not otherwise

classified

: Static-accumulating flammable liquid. Vapors may form explosive mixtures with air.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Leaded racing gasoline

Product code : 19009570

Ingredient name	%	CAS number
Naphtha (petroleum), light alkylate	55 - 85	64741-66-8
isooctane	20 - 40	26635-64-3
toluene	15 - 25	108-88-3
isopentane	1 - 10	78-78-4
tetraethyllead	0.25 - 0.5	78-00-2

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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.

Date of issue/Date of revision : 09/01/2023 : 09/01/2023 Version :1 2/17 Date of previous issue

Section 4. First aid measures

Skin contact

: Flush contaminated skin with plenty of 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. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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 : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: Causes skin irritation.

Ingestion: Can cause central nervous system (CNS) depression. May be fatal if swallowed and

enters airways.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

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 : No specific treatment.

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

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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.

Date of issue/Date of revision : 09/01/2023 Date of previous issue : 09/01/2023 Version :1 3/17

Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO2, water spray (fog) or foam. Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising from the chemical

: Highly flammable liquid and vapor. 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. 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 asphyxiants

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.

: Highly flammable liquid and vapor.

Remark (Explosibility)

Remark

: Vapors may form explosive mixtures with air.

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.

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

Date of issue/Date of revision : 09/01/2023 Date of previous issue : 09/01/2023 Version : 1 4/17

Section 6. Accidental release measures

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). Avoid exposure obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. 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. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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.

including any incompatibilities

Conditions for safe storage, : 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. Store locked up. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
isooctane	ACGIH TLV (United States, 1/2021).
	TWA: 300 ppm 8 hours.
toluene	OSHA PEL Z2 (United States, 2/2013).
	TWA: 200 ppm 8 hours.
	CEIL: 300 ppm
	AMP: 500 ppm 10 minutes.
	NIOSH REL (United States, 10/2020).
	TWA: 100 ppm 10 hours.
	TWA: 375 mg/m³ 10 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 560 mg/m³ 15 minutes.
	ACGIH TLV (United States, 1/2021).
	Ototoxicant.
	TWA: 20 ppm 8 hours.
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 100 ppm 8 hours.
	TWA: 375 mg/m ³ 8 hours.
	STEL: 150 ppm 15 minutes.
	STEL: 560 mg/m³ 15 minutes.
isopentane	ACGIH TLV (United States, 1/2021).

Date of issue/Date of revision : 09/01/2023 : 09/01/2023 Version :1 5/17 Date of previous issue

Section 8. Exposure controls/personal protection

TWA: 1000 ppm 8 hours.
ACGIH TLV (United States, 1/2022).
Absorbed through skin.
TWA: 0.1 mg/m³, (as Pb) 8 hours.
NIOSH REL (United States, 10/2020).
Absorbed through skin.
TWA: 0.075 mg/m³, (as Pb) 10 hours.
OSHA PEL (United States, 5/2018).
Absorbed through skin.
TWA: 0.075 mg/m³, (as Pb) 8 hours.
OSHA PEL 1989 (United States, 3/1989).
Absorbed through skin.
TWA: 0.08 mg/m³, (as Pb) 8 hours.

Biological exposure indices

Ingredient name	Exposure indices
toluene	ACGIH BEI (United States, 1/2023) BEI: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift. BEI: 0.3 mg/g creatinine, o-cresol [in urine]. Sampling time: end of shift. BEI: 0.02 mg/l, toluene [in blood]. Sampling time: prior to last shift of workweek.

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, fume scrubbers, 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 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 contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

: Chemical-resistant, impervious 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. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

Recommended: > 8 hours (breakthrough time): nitrile rubber, Viton®, Teflon

: 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. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Date of issue/Date of revision : 09/01/2023 Date of previous issue : 09/01/2023 Version : 1 6/17

Section 8. Exposure controls/personal protection

Other skin protection : 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.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use.

Recommended: Ensure an MSHA/NIOSH-approved respirator or equivalent is used.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.
Color : Green.
Odor : Gasoline
Odor threshold : <1 ppm

pH : Not applicable.Melting point/freezing point : Not available.

Boiling point, initial boiling point, and boiling range

: 38 to 127°C (100.4 to 260.6°F) [ASTM D 86]

Flash point : -40° C (-40° F)

Flammability : Highly flammable liquid and vapor.

Lower and upper explosion limit/flammability limit

: Lower: 1.5% Upper: 7.6%

Vapor pressure : 4.5 PSI [@ 100°F [37.8°C]]

Relative vapor density : Not available.

Relative density : 0.735 [ASTM D 287]

Solubility in water : NIL - 15%

Partition coefficient: n- : 2 to 7

Partition coemici

octanol/water

. 2107

Auto-ignition temperature : 280°C (536°F) [Estimated.] **Decomposition temperature** : Not available.

Viscosity : Not available.

Explosive properties : Vapors may form explosive mixtures with air.

Oxidizing properties : Not available.

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

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. Vapors may

form explosive mixtures with air.

Date of issue/Date of revision : 09/01/2023 Date of previous issue : 09/01/2023 Version : 1 7/17

Section 10. Stability and reactivity

Incompatible materials

: Reactive or incompatible with the following materials:

Strong oxidizing materials

strong acids strong alkalis

halogenated compounds hydrogen peroxide

chlorine

concentrated oxygen

Hazardous decomposition

products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide asphyxiants

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum), light alkylate	LC50 Inhalation Vapor	Rat	>6.31 mg/l	4 hours
	LC50 Inhalation Vapor	Rat - Male, Female	5610 mg/m³	4 hours
	LD50 Dermal	Rabbit - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-
isooctane	LC50 Inhalation Vapor	Rat - Male, Female	>33.52 mg/l	4 hours
toluene	LC50 Inhalation Vapor	Rat - Male, Female	>20 mg/l	4 hours
	LD50 Dermal	Rabbit	12000 mg/kg	-
	LD50 Oral	Rat	2600 mg/kg	-
isopentane	LC50 Inhalation Gas.	Rat - Male, Female	>20000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	280000 mg/m³	4 hours
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
tetraethyllead	LC50 Inhalation Vapor	Rat	0.85 mg/l	1 hours
	LC50 Inhalation Vapor	Rat	850 mg/m³	1 hours
	LD50 Oral	Rat	12.3 mg/kg	-
	LD50 Oral	Rat - Male, Female	14.18 mg/kg	-
	LDLo Dermal	Dog	547 mg/kg	-

Conclusion/Summary

: May be fatal if swallowed and enters airways.

Date of issue/Date of revision : 09/01/2023 Date of previous issue : 09/01/2023 Version : 1 8/17

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
toluene	Eyes - Non-irritating to the eyes.	Rabbit	-	1 minutes 0.1 ml	7 days
	Skin - Irritant	Rabbit	-	72 hours 0.5 ml	-

Conclusion/Summary

Skin: Causes skin irritation.

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

Respiratory: Not available.

Sensitization

Conclusion/Summary

Skin : Not available.

Respiratory : Not available.

Mutagenicity

Conclusion/Summary: Not available.

Carcinogenicity

Conclusion/Summary: May cause cancer

Classification

Product/ingredient name	OSHA	IARC	NTP
toluene	-	3	-
tetraethyllead	-	3	Reasonably anticipated to be a human carcinogen.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
toluene	Negative	Negative	Negative	Rat - Male, Female	Inhalation: 600 ppm	90 days; 6 hours per day
	-	Positive	-	Rat - Male	Inhalation: 2000 ppm	90 days; 6 hours per day
	-	Negative	Positive	Rat - Female	Inhalation: 2000 ppm	90 days; 6 hours per day
tetraethyllead	Positive	-	Positive	Rat	Oral: 1 mg/kg	-

Conclusion/Summary: May damage fertility.

Teratogenicity

Conclusion/Summary: May damage the unborn child.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Naphtha (petroleum), light alkylate	Category 3	-	Narcotic effects
isooctane	Category 3	-	Narcotic effects
toluene	Category 3	-	Narcotic effects
isopentane	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Date of issue/Date of revision	: 09/01/2023	Date of previous issue	: 09/01/2023	Version : 1	9/17
--------------------------------	--------------	------------------------	--------------	-------------	------

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
toluene	Category 2	-	cardiovascular system, central nervous system (CNS), kidneys, liver, respiratory system
tetraethyllead	Category 2	-	-

Aspiration hazard

Name	Result
SUNOCO DXP	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), light alkylate	ASPIRATION HAZARD - Category 1
isooctane	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1
isopentane	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 : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: Causes skin irritation.

ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and

enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

Date of issue/Date of revision : 09/01/2023 Date of previous issue : 09/01/2023 Version : 1 10/17

Section 11. Toxicological information

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.

Potential chronic health effects

Not available.

Conclusion/Summary: Not available.

General: May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity: May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.

Reproductive toxicity: May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
Naphtha (petroleum), light alkylate	N/A	2500	N/A	N/A	N/A
isopentane	N/A	N/A	N/A	280	N/A
tetraethyllead	0.5	5	N/A	0.5	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Naphtha (petroleum), light alkylate	Acute EC50 30000 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute LC50 8.2 mg/l	Fish - Pimephales promelas	96 hours
toluene	EC50 433 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	EC50 5.6 to 9.83 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	LC50 11 to 15 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
isopentane	EC50 2.3 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
tetraethyllead	Acute LC50 85 μg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 0.23 mg/l Marine water	Fish - Pleuronectes platessa	96 hours

Conclusion/Summary: Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Date of issue/Date of revision : 09/0	01/2023 Date of previous issue	e : 09/01/2023 Version	:1 11/17
---------------------------------------	--------------------------------	-------------------------------	----------

Section 12. Ecological information

Conclusion/Summary

: There are no data available on the mixture itself.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
SUNOCO DXP	2 to 7	-	High
Naphtha (petroleum), light alkylate	-	10 to 2500	High
toluene	2.73	90	Low
isopentane	3	171	Low
tetraethyllead	4.15	460	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : 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.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS#	Status	Reference number
Toluene	108-88-3	Listed	U220

Section 14. Transport information

	Classification	Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	UN1203	UN1203	UN1203	UN1203	UN1203	UN1203
UN proper shipping name	Gasoline	GASOLINE	GASOLINA	GASOLINE	GASOLINE	Gasoline
Transport hazard class(es)	3	3	3	3	3	3

Date of issue/Date of revision : 09/01/2023 Date of previous issue : 09/01/2023 Version : 1 12/17

Section 14. Transport information

Label	TAMMET LOOP			*	*	A
Packing group	П	П	П	П	II	II
Environmental hazards	No.	No.	No.	Yes.	Marine Pollutant: Yes	Yes. The environmentally hazardous substance mark is not required.

Additional information

DOT Classification : Reportable quantity 2000 lbs / 908 kg [326.35 gal / 1235.4 L]. Package sizes shipped

in quantities less than the product reportable quantity are not subject to the RQ

(reportable quantity) transportation requirements.

Limited quantity Yes.

Packaging instruction Exceptions: 150. Non-bulk: 202. Bulk: 242. Quantity limitation Passenger aircraft/rail: 5 L. Cargo aircraft: 60 L.

Special provisions 144, 177, B1, B33, IB2, T4

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous

Goods Regulations: 2.18-2.19 (Class 3).

Explosive Limit and Limited Quantity Index 30

Passenger Carrying Vessel Index 100 Passenger Carrying Road or Rail Index 5 **Special provisions** 17, 88, 91, 98, 150

Mexico Classification

: Special provisions 243

ADR/RID

: The environmentally hazardous substance mark is not required when transported in

sizes of ≤5 L or ≤5 kg.

Hazard identification number 33

Limited quantity 1 L

Special provisions 243, 534, 664

Tunnel code (D/E)

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules F-E, S-E

Special provisions 243

IATA : The environmentally hazardous substance mark may appear if required by other

transportation regulations.

Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353. Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities - Passenger

Aircraft: 1 L. Packaging instructions: Y341.

Special provisions A100

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: Not applicable.

to IMO instruments

Date of issue/Date of revision : 09/01/2023 : 09/01/2023 Version :1 13/17 Date of previous issue

Section 15. Regulatory information

U.S. Federal regulations : TSCA 4(a) proposed test rules: tetraethyllead

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Water Act (CWA) 307: toluene; tetraethyllead Clean Water Act (CWA) 311: toluene; tetraethyllead

Clean Air Act (CAA) 112 regulated flammable substances: isopentane

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs)

: Listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals (Precursor Chemicals)

: Not listed

DEA List II Chemicals (Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
tetraethyllead	0.25 - 0.5	Yes.	100	7.1	10	0.71

SARA 304 RQ : 2000 lbs / 908 kg [326.4 gal / 1235.4 L]

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 2

SKIN IRRITATION - Category 2 CARCINOGENICITY - Category 1B

TOXIC TO REPRODUCTION - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

ASPIRATION HAZARD - Category 1

Composition/information on ingredients

Name	%	Classification
Naphtha (petroleum), light alkylate	55 - 85	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
isooctane	20 - 40	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
toluene	15 - 25	FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1

Section 15. Regulatory information

isopentane	1 - 10	FLAMMABLE LIQUIDS - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
tetraethyllead	0.25 - 0.5	FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (oral) - Category 1 ACUTE TOXICITY (dermal) - Category 1 ACUTE TOXICITY (inhalation) - Category 2 CARCINOGENICITY - Category 1B TOXIC TO REPRODUCTION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	toluene	108-88-3	≥15 - ≤25
Supplier notification	toluene	108-88-3	≥15 - ≤25

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: TOLUENE; ISOPENTANE

New York : The following components are listed: Toluene

New Jersey : The following components are listed: TOLUENE; ISOPENTANE; TETRAETHYL LEAD Pennsylvania : The following components are listed: ISOOCTANE; BENZENE, METHYL-; BUTANE,

2-METHYL-

California Prop. 65



MARNING: This product can expose you to chemicals including Lead and lead compounds, which is 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.

Ingredient name		Maximum acceptable dosage level
Toluene Lead and lead compounds	-	Yes.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Ingredient name	List name	Status
Tetraethyl lead; Plumbane, tetraethyl; TEL	Industrial	Listed

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Date of issue/Date of revision	: 09/01/2023	Date of previous issue	: 09/01/2023	Version : 1	15/17
--------------------------------	--------------	------------------------	--------------	-------------	-------

Section 15. Regulatory information

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

NDSL.

China : All components are listed or exempted.

Eurasian Economic Union : Russian Federation inventory: All components are listed or exempted.

New Zealand : All components are listed or exempted. **Philippines** : All components are listed or exempted. Republic of Korea : All components are listed or exempted. **Taiwan** : All components are listed or exempted. **United States** : All components are active or exempted. **Viet Nam** : All components are listed or exempted.

Section 16. Other information

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



Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
SKIN IRRITATION - Category 2	Calculation method
CARCINOGENICITY - Category 1B	Calculation method
TOXIC TO REPRODUCTION - Category 1A	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1	Calculation method Expert judgment

History

Date of printing : 09/01/2023 Date of issue/Date of : 09/01/2023

revision

Date of previous issue : 09/01/2023

Version

Key to abbreviations : ADR = The European Agreement concerning the International Carriage of Dangerous

Goods by Road

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor DOT = Department of Transportation

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)

N/A = Not available

RID = The Regulations concerning the International Carriage of Dangerous Goods by

SGG = Segregation Group

TDG = Transportation of Dangerous Goods

UN = United Nations

16/17 Date of issue/Date of revision : 09/01/2023 : 09/01/2023 Version :1 Date of previous issue

Section 16. Other information

References

: API (1977) Mutagenicity evaluation of unleaded gasoline. Study conducted by Litton Bionetics. API Med. Res. Publ. 28-30173. Washington DC: American Petroleum Institute.

API (1983) Carcinogenic potential of key petroleum products. Study conducted by Eppley Institute for Research in Cancer, University of Nebraska Medical School. API Med. Res. Publ. 30-31646. Washington DC: American Petroleum Institute.

API (1995) Primary skin irritation study in rabbits of API 91-01 and PS-6. Unleaded test gasolines. Study conducted by Hill Top Biolabs Inc. API Toxicology Report No. 409. Washington DC: American Petroleum Institute.

API (2005) Baseline gasoline vapor condensate: a 13-week whole-body inhalation toxicity study in rats with neurotoxicity assessments and 4-week in vivo genotoxicity and immunotoxicity assessments. Study conducted by Huntingdon Life Sciences. Study No. 00-6125. Washington DC: American Petroleum Institute.

ARCO (1986-A) Primary eye irritation study in rabbits administered test article F-64-01 unleaded Watson premium gasoline. UBTL Study No. 60583. Los Angeles CA: ARCO.

ARCO (1986-B) Dermal sensitization study in guinea pigs administered test article F-64-01 unleaded premium gasoline. UBTL Study No. 60613. Los Angeles CA: ARCO.

ARCO (1986-C) Twenty-eight (28) day dermal toxicity study in rats on test article F-64-01 unleaded Watson premium gasoline. UBTL Study No. 60761. Los Angeles CA: ARCO.

Davis, A. et al (1960) The effects on human volunteers of exposure to air containing gasoline vapor. Arch Environ Health 1, 548-554.

Drinker, P. et al (1943) The threshold toxicity of gasoline vapor. J Ind Hyg Toxicol 25, 6, 225-232.

Halder, C.A. et al (1985) Hydrocarbon nephropathy in male rats: identification of the nephrotoxic components of unleaded gasoline. Toxicol Ind Health 1, 3, 67-87.

McKee, R.H. et al (2000) Assessment in rats of the reproductive toxicity of gasoline from a gasoline vapor recovery unit. Reprod Toxicol 14, 4, 337-353.

Roberts, L. et al (2001) Developmental toxicity evaluation of unleaded gasoline vapor in the rat. Reprod Toxicol 15, 5, 487-494.

Short, B.G. et al (1989) Promoting effects of unleaded gasoline and 2,2,4-trimethylpentane on the development of atypical cell foci and renal tubular cell tumors in rats exposed to N-ethyl-N-hydroxy-ethylnitrosamine. Cancer Research 49, 22, 6369-6378.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue/Date of revision : 09/01/2023 Date of previous issue : 09/01/2023 Version : 1 17/17