


**TrusTec™ PRF Isooctane + TEL**

Version 2.0

Revision Date 2022-11-10

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**
**Product information**

Product Name : TrusTec™ PRF Isooctane + TEL  
 Material : 1098715, 1098717, 1098712, 1098713, 1098720, 1098714,  
 1098719, 1098716, 1092025, 1091995, 1092012, 1092013,  
 1091997, 1092017, 1092018, 1092019, 1092008, 1095235,  
 1092007, 1094713, 1094712, 1094671, 1094670, 1094669,  
 1094668, 1092023, 1091996, 1091944, 1091945, 1091947,  
 1091948, 1091949, 1091950, 1092009, 1092014, 1091943,  
 1091998, 1092000, 1092001, 1092002, 1092003, 1092004,  
 1091994, 1062407, 1098691, 1097787, 1020579, 1020578,  
 1020576, 1020577, 1105590

Use : Fuel

**Company** : Chevron Phillips Chemical Company LP  
 Specialty Chemicals  
 10001 Six Pines Drive  
 The Woodlands, TX 77380

**Emergency telephone:**
**Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

**Transport:**

CHEMTREC 800.424.9300 or 703.527.3887(int'l)

Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090

Mexico CHEMTREC 01-800-681-9531 (24 hours)

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Argentina: +(54)-1159839431

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)

Belgium: 070 245 245 (24 hours/day, 7 days/week)

Bulgaria: +359 2 9154 233

Croatia: +3851 2348 342 (24 hours/day, 7 days/week)

Cyprus: 1401

Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402

Denmark: Danish Poison Center (Gifflinjen): +45 8212 1212

Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Finland: 0800 147 111 09 471 977 (24 hours/day)

France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)

Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

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Greece: (0030) 2107793777 (24 hours/day, 7 days/week)  
 Hungary: +36-80-201-199 (24 hours/day, 7 days/week)  
 Iceland: 543 2222 (24 hours/day, 7 days/week)  
 Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Italy: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic  
 Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371  
 67042473. (24 hours.)  
 Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Lithuania: +370 (85) 2362052  
 Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)  
 Malta: +356 2395 2000  
 The Netherlands: NVIC: +31 (0)88 755 8000  
 Norway: 22 59 13 00 (24 hours/day, 7 days/week)  
 Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 Portugal: CIAV phone number: +351 800 250 250  
 Romania: +40213183606  
 Slovakia: +421 2 5477 4166  
 Slovenia: Phone number: 112  
 Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24  
 hours/day, 7 days/week)  
 Sweden: 112 – ask for Poisons Information

Responsible Department : Product Safety and Toxicology Group  
 E-mail address : SDS@CPChem.com  
 Website : www.CPChem.com


**SECTION 2: Hazards identification****Classification of the substance or mixture**

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

**Classification**

: Flammable liquids, Category 2  
 Acute toxicity, Category 4, Inhalation  
 Skin irritation, Category 2  
 Carcinogenicity, Category 1B  
 Reproductive toxicity, Category 1A  
 Specific target organ toxicity - single exposure, Category 3,  
 Central nervous system  
 Aspiration hazard, Category 1

**Labeling**

Symbol(s) : 

Signal Word : Danger

Hazard Statements : H225: Highly flammable liquid and vapor.  
 H304: May be fatal if swallowed and enters airways.  
 H315: Causes skin irritation.  
 H332: Harmful if inhaled.  
 H336: May cause drowsiness or dizziness.

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H350: May cause cancer.  
H360: May damage fertility or the unborn child.

Precautionary Statements : **Prevention:**  
 P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.  
 P233 Keep container tightly closed.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
 P242 Use only non-sparking tools.  
 P243 Take precautionary measures against static discharge.  
 P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
 P264 Wash skin thoroughly after handling.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.  
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
 P331 Do NOT induce vomiting.  
 P362 Take off contaminated clothing and wash before reuse.  
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
**Storage:**  
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403 + P235 Store in a well-ventilated place. Keep cool.  
**Disposal:**  
 P501 Dispose of contents/ container to an approved waste disposal plant.

**Carcinogenicity:**

<b>IARC</b>	Group 2A: Probably carcinogenic to humans
	1,2-dibromoethane 106-93-4
<b>NTP</b>	Reasonably anticipated to be a human carcinogen
	Tetraethyl Lead 78-00-2
	1,2-dibromoethane 106-93-4

**SECTION 3: Composition/information on ingredients**

Synonyms : 2,2,4-Trimethylpentane / Tetraethyl Lead  
 Molecular formula : Mixture

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Component	CAS-No.	Weight %
2,2,4-Trimethylpentane (Isooctane)	540-84-1	99.4 - 100
Tetraethyl Lead	78-00-2	0.1 - 1
1,2-Dibromoethane	106-93-4	0.1 - 0.3

**SECTION 4: First aid measures**

- General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.
- If inhaled : Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

**SECTION 5: Firefighting measures**

- Flash point : -12.22°C (10.00°F) estimated
- Autoignition temperature : 411°C (772°F)
- Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.
- Unsuitable extinguishing media : High volume water jet.
- Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
- Fire and explosion protection : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge

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(which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Hazardous decomposition products : Hydrocarbons. Carbon oxides.

**SECTION 6: Accidental release measures**

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

**SECTION 7: Handling and storage****Handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

**Storage**

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

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**SECTION 8: Exposure controls/personal protection****Ingredients with workplace control parameters****US**

Components	Basis	Value	Control parameters	Note
2,2,4-Trimethylpentane (Isooctane)	ACGIH	TWA	300 ppm,	
Tetraethyl Lead	ACGIH	TWA	0.1 mg/m3	A4, Skin,
	OSHA Z-1	TWA	0.075 mg/m3	X,
	OSHA Z-1-A	TWA	0.075 mg/m3	X,
1,2-Dibromoethane	NIOSH REL	TWA	0.045 ppm,	Ca,
	NIOSH REL	C	0.13 ppm,	Ca,
	OSHA Z-2	TWA	20 ppm,	
	OSHA Z-2	CEIL	30 ppm,	
	OSHA Z-2	Peak	50 ppm,	

A4 Not classifiable as a human carcinogen  
 Ca Potential Occupational Carcinogen  
 Skin Danger of cutaneous absorption  
 X Skin notation

**Immediately Dangerous to Life or Health Concentrations (IDLH)**

Substance name	CAS-No.	Control parameters	Update
Tetraethyl Lead	78-00-2	Immediately Dangerous to Life or Health Concentration Value 40 mg/m <sup>3</sup>	1995-03-01
1,2-Dibromoethane	106-93-4	Immediately Dangerous to Life or Health Concentration Value 100 parts per million	1995-03-01

**Engineering measures**

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

Respiratory protection : If ventilation or other engineering controls are not adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate. If exposure to harmful levels of airborne material may occur, a NIOSH approved respirator that provides protection may be appropriate, such as: Air-Purifying Respirator for Organic Vapors. A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

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Eye protection	: Eye wash bottle with pure water. Tightly fitting safety goggles.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****Appearance**

Form	: liquid
Physical state	: liquid
Color	: Colorless
Odor	: Mild

**Safety data**

Flash point	: -12.22°C (10.00°F) estimated
Lower explosion limit	: 1 %(V)
Upper explosion limit	: 7 %(V)
Oxidizing properties	: No
Autoignition temperature	: 411°C (772°F)
Thermal decomposition	: No data available
Molecular formula	: Mixture
Molecular weight	: Not applicable
pH	: Not applicable
Pour point	: No data available
Boiling point/boiling range	: 99°C (210°F)
Vapor pressure	: 1.70 PSI at 37.8°C (100.0°F)
Relative density	: 0.7 at 15.6 °C (60.1 °F)
Water solubility	: negligible
Partition coefficient: n-octanol/water	: No data available

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Viscosity, kinematic	: 0.503 cSt at 20°C (68°F)
Relative vapor density	: 3 (Air = 1.0)
Evaporation rate	: 1
Percent volatile	: > 99 %

**SECTION 10: Stability and reactivity**

<b>Reactivity</b>	: Stable under recommended storage conditions.
<b>Chemical stability</b>	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Possibility of hazardous reactions</b>	
<b>Hazardous reactions</b>	: Hazardous reactions: Hazardous polymerization does not occur.  Hazardous reactions: Vapors may form explosive mixture with air.
<b>Conditions to avoid</b>	: Heat, flames and sparks.
<b>Materials to avoid</b>	: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
<b>Thermal decomposition</b>	: No data available
<b>Hazardous decomposition products</b>	: Hydrocarbons Carbon oxides
<b>Other data</b>	: No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information**

<b>TrusTec™ PRF Isooctane + TEL</b>	
<b>Acute oral toxicity</b>	: Acute toxicity estimate: 3,586 mg/kg Method: Calculation method
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<b>Acute inhalation toxicity</b>	: Acute toxicity estimate: 19.39 mg/l Exposure time: 4 h Test atmosphere: vapor Method: Calculation method



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**Acute dermal toxicity** : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

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**Skin irritation** : Skin irritation  
largely based on animal evidence.

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**Eye irritation** : Vapors may cause irritation to the eyes, respiratory system  
and the skin.

**Sensitization**

2,2,4-Trimethylpentane : Did not cause sensitization on laboratory animals.  
(Isooctane)  
1,2-Dibromoethane Substance is not considered to be potential skin sensitiser.

**Repeated dose toxicity**

2,2,4-Trimethylpentane : Species: Rat, Male and female  
(Isooctane) Sex: Male and female  
Application Route: Inhalation  
Dose: 0, 668, 2220, 6646 ppm  
Exposure time: 13 weeks  
Number of exposures: 6 hr/day 5 d/wk  
NOEL: 8.117 mg/l 2220 ppm  
Method: OECD Guideline 413  
Information given is based on data obtained from similar  
substances.

Tetraethyl Lead

Species: Monkey, Male and female  
Sex: Male and female  
Application Route: oral gavage  
Dose: 0.009 mg TEL/kg/bw/day  
Exposure time: 6 months  
Number of exposures: Once per day, 7 d/wk  
NOEL: 0.009 mg/kg

Species: Rat, male  
Sex: male  
Application Route: oral gavage  
Dose: 0, 0.2, 2.0 mg/kg/bw  
Exposure time: 13 wk  
Number of exposures: Once per day. 5 d/wk  
Lowest observable effect level: 0.2 mg/kg  
Target Organs: Nervous system, Blood

**Genotoxicity in vitro**

2,2,4-Trimethylpentane : Test Type: Ames test  
(Isooctane) Method: Mutagenicity (Escherichia coli - reverse mutation  
assay)  
Result: negative

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Test Type: Mouse lymphoma assay  
 Method: OECD Guideline 476  
 Result: negative

Test Type: Sister Chromatid Exchange Assay  
 Result: negative

Test Type: Unscheduled DNA synthesis assay  
 Result: negative

**Tetraethyl Lead**

Test Type: Ames test  
 Concentration: 0, 1, 3.3, 10, 33.3, 100  
 Method: OECD Test Guideline 471  
 Result: negative

**Genotoxicity in vivo**

2,2,4-Trimethylpentane  
 (Isooctane)

: Test Type: Unscheduled DNA synthesis assay  
 Species: Mouse  
 Dose: 500 mg/kg  
 Result: negative

Test Type: Unscheduled DNA synthesis assay  
 Species: Rat  
 Dose: 500 mg/kg  
 Result: negative

**Tetraethyl Lead**

Test Type: Dominant lethal assay  
 Species: Mouse  
 Dose: 6.48, 32.0 mg/kg/d  
 Result: In vivo tests did not show any chromosomal changes.

Test Type: Dominant lethal assay  
 Species: Mouse  
 Dose: 6.48, 32.0 mg/kg/d  
 Result: In vivo tests did not show any chromosomal changes.

**Reproductive toxicity**

2,2,4-Trimethylpentane  
 (Isooctane)

: Species: Rat  
 Sex: male and female  
 Application Route: Inhalation  
 Dose: 0, 900, 3000, 9000 ppm  
 Number of exposures: 6 h/d 5 d/wk  
 Method: OECD Test Guideline 416  
 NOAEL Parent: 3000 ppm  
 NOAEL F1: 3000 ppm  
 NOAEL F2: 3000 ppm  
 Information given is based on data obtained from similar substances.

**Developmental Toxicity**

2,2,4-Trimethylpentane  
 (Isooctane)

: Species: Rat  
 Application Route: Inhalation  
 Dose: 0, 400, 1200 ppm  
 Number of exposures: 6h/d  
 Test period: GD6-15

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NOAEL Teratogenicity: 1200 ppm  
 NOAEL Maternal: 1200 ppm  
 Information given is based on data obtained from similar substances.

Species: Rat  
 Application Route: Inhalation  
 Dose: 0, 900, 3000, 9000 ppm  
 Number of exposures: 6h/d  
 Test period: GD6-15  
 Method: OECD Guideline 414  
 NOAEL Teratogenicity: 9000 ppm  
 NOAEL Maternal: 3000 ppm  
 Information given is based on data obtained from similar substances.

**Tetraethyl Lead**

Species: Rat  
 Application Route: oral gavage  
 Dose: 0, 0.01, 0.1, 1, 10 mg/kg  
 Test period: GD 6-16  
 NOAEL Teratogenicity: 0.1 mg/kg  
 NOAEL Maternal: 0.1 mg/kg

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**Aspiration toxicity** : May be fatal if swallowed and enters airways.

**CMR effects**

2,2,4-Trimethylpentane (Isooctane) : Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.  
 Teratogenicity: Animal testing did not show any effects on fetal development.  
 Reproductive toxicity: Animal testing did not show any effects on fertility.

**Tetraethyl Lead**

Reproductive toxicity: Positive evidence of adverse effects on sexual function, fertility and/or development from human epidemiological studies.

**1,2-Dibromoethane**

Carcinogenicity: Possible human carcinogen  
 Mutagenicity: In vitro tests showed mutagenic effects  
 Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

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**Further information** : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

**SECTION 12: Ecological information****Toxicity to fish**

2,2,4-Trimethylpentane : LC50: 0.11 mg/l

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(Isooctane) Exposure time: 96 h  
 Species: *Oncorhynchus mykiss* (rainbow trout)  
 semi-static test Method: OECD Test Guideline 203  
 Information given is based on data obtained from similar substances.

Tetraethyl Lead LC50: 0.2 mg/l  
 Exposure time: 96 h  
 Species: *Lepomis macrochirus* (Bluegill sunfish)

1,2-Dibromoethane LC50: 4.30 mg/l  
 Exposure time: 96 h  
 Species: *Pimephales promelas* (fathead minnow)  
 flow-through test

**Toxicity to daphnia and other aquatic invertebrates**

2,2,4-Trimethylpentane (Isooctane) : EC50: 0.4 mg/l  
 Exposure time: 48 h  
 Species: *Daphnia magna* (Water flea)  
 static test Information given is based on data obtained from similar substances.

1,2-Dibromoethane LC50: 6.5 mg/l  
 Exposure time: 48 h  
 Species: *Daphnia magna* (Water flea)  
 static test

**Toxicity to algae**

2,2,4-Trimethylpentane (Isooctane) : EL50: 2.943 mg/l  
 Exposure time: 72 h  
 Method: QSAR modeled data

**Toxicity to fish (Chronic toxicity)**

1,2-Dibromoethane : NOEC: 0.034 mg/l  
 Species: *Oryzias latipes* (Japanese medaka)

**Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)**

2,2,4-Trimethylpentane (Isooctane) : NOEL: 0.17 mg/l  
 Exposure time: 21 d  
 Species: *Daphnia magna* (Water flea)  
 Method: OECD Test Guideline 211  
 Information given is based on data obtained from similar substances.

Biodegradability : Expected to be ultimately biodegradable  
 Information given is based on data obtained from similar substances.

Elimination information (persistence and degradability)

Bioaccumulation

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2,2,4-Trimethylpentane (Isooctane)	: Bioconcentration factor (BCF): 231 Method: QSAR modeled data This material is not expected to bioaccumulate.
Mobility	
2,2,4-Trimethylpentane (Isooctane)	: Medium: Air Method: Calculation, Mackay Level I Fugacity Model After release, disperses into the air.
Results of PBT assessment 2,2,4-Trimethylpentane (Isooctane)	: Non-classified PBT substance, Non-classified vPvB substance
Additional ecological information	: Very toxic to aquatic life with long lasting effects.
<b>Ecotoxicology Assessment</b>	
Short-term (acute) aquatic hazard	: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard	: Very toxic to aquatic life with long lasting effects.

**SECTION 13: Disposal considerations**

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

**SECTION 14: Transport information**

**The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).**

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

**US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)**

UN1262, OCTANES, 3, II, MARINE POLLUTANT, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), TETRAETHYL LEAD), RQ (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), TETRAETHYL LEAD)

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**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**

UN1262, OCTANES, 3, II, (-12.22 °C c.c.), MARINE POLLUTANT, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), TETRAETHYL LEAD)

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**

UN1262, OCTANES, 3, II

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**

UN1262, OCTANES, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), TETRAETHYL LEAD)

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**

33, UN1262, OCTANES, 3, II, ENVIRONMENTALLY HAZARDOUS, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), TETRAETHYL LEAD)

**ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)**

UN1262, OCTANES, 3, II, ENVIRONMENTALLY HAZARDOUS, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), TETRAETHYL LEAD)

**Maritime transport in bulk according to IMO instruments****SECTION 15: Regulatory information****National legislation**

**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)  
 Acute toxicity (any route of exposure)  
 Carcinogenicity  
 Reproductive toxicity  
 Aspiration hazard  
 Skin corrosion or irritation  
 Specific target organ toxicity (single or repeated exposure)

**EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO - KNOW**

CERCLA Reportable Quantity : 333 lbs  
 1,2-Dibromoethane  
 1000 lbs  
 2,2,4-Trimethylpentane (Isooctane)  
 Tetraethyl Lead

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SARA 302 Reportable Quantity : 1000 lbs  
Tetraethyl Lead

SARA 302 Threshold Planning Quantity : This material does not contain any components with a section 302 EHS TPQ.

SARA 304 Reportable Quantity : 1000 lbs  
Tetraethyl Lead 78-00-2 10 lbs

SARA 313 Components : The following components are subject to reporting levels established by SARA Title III, Section 313:  
: 1,2-Dibromoethane - 106-93-4

**Clean Air Act**

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):  
: 2,2,4-Trimethylpentane (Isooctane) - 540-84-1

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

**US State Regulations**

Pennsylvania Right To Know : 2,2,4-Trimethylpentane (Isooctane) - 540-84-1  
Tetraethyl Lead - 78-00-2  
1,2-Dibromoethane - 106-93-4

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California Prop. 65 Components : WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov/food](http://www.P65Warnings.ca.gov/food).

Tetraethyl Lead	78-00-2
1,2-dibromoethane	106-93-4
Ethyl Chloride	75-00-3
Naphthalene	91-20-3

WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

1,2-dibromoethane	106-93-4
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**Notification status**

Europe REACH : A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s).

Switzerland CH INV : On the inventory, or in compliance with the inventory  
 United States of America (USA) TSCA : On or in compliance with the active portion of the TSCA inventory

Canada DSL : All components of this product are on the Canadian DSL

Other AIIIC : On the inventory, or in compliance with the inventory

New Zealand NZIoC : Not in compliance with the inventory

Japan ENCS : Not in compliance with the inventory

Korea KECI : A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s).

Philippines PICCS : On the inventory, or in compliance with the inventory

Taiwan TCSI : On the inventory, or in compliance with the inventory

China IECSC : On the inventory, or in compliance with the inventory



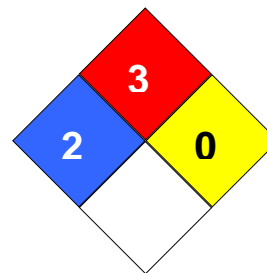
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**SECTION 16: Other information**

**NFPA Classification** : Health Hazard: 2  
Fire Hazard: 3  
Reactivity Hazard: 0

**Further information**

Legacy SDS Number : 38510

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

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

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and	TSCA	Toxic Substance Control Act

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	New Chemical Substances		
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		