

**TrusTec™ PRF Octane Blend No.80**

Version 1.3

Revision Date 2023-09-20

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

Product Name : TrusTec™ PRF Octane Blend No.80
Material : 1024376, 1024372, 1024375, 1024374, 1093788, 1024377

Use : Reference 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 (Giftlinjen): +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)
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.)

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

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
 Skin irritation, Category 2
 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.
 H336: May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**
 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.
 P280 Wear protective gloves/ eye protection/ face protection.

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

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.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

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.

Potential Health Effects

Symptoms of Overexposure : No data available

Carcinogenicity:**IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3: Composition/information on ingredients

Synonyms : Primary Reference Fuel
PRF (ASTM) Octane Blend No.80
Octane Reference Fuel

Molecular formula : Mixture

| Component | CAS-No. | Weight % |
|------------------------------------|----------|-------------|
| 2,2,4-Trimethylpentane (Isooctane) | 540-84-1 | 79.9 - 80.1 |
| n-Heptane | 142-82-5 | 19.7 - 20.3 |

SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

- 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.

Notes to physician

- Symptoms : No data available.
- Risks : No data available.
- Treatment : No data available.

SECTION 5: Firefighting measures

- Flash point : -8°C (18°F)
Method: Tag closed cup
- Autoignition temperature : No data available
- Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO2). 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 (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

Hazardous decomposition products : 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.

Use : Reference Fuel

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

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

US

| Components | Basis | Value | Control parameters | Note |
|------------------------------------|------------|-------|----------------------|------|
| 2,2,4-Trimethylpentane (Isooctane) | ACGIH | TWA | 300 ppm, | |
| n-Heptane | OSHA Z-1 | TWA | 500 ppm, 2,000 mg/m3 | |
| | OSHA Z-1-A | TWA | 400 ppm, 1,600 mg/m3 | |
| | OSHA Z-1-A | STEL | 500 ppm, 2,000 mg/m3 | |
| | ACGIH | TWA | 400 ppm, | |
| | ACGIH | STEL | 500 ppm, | |

Immediately Dangerous to Life or Health Concentrations (IDLH)

| Substance name | CAS-No. | Control parameters | Update |
|----------------|----------|---|------------|
| n-Heptane | 142-82-5 | Immediately Dangerous to Life or Health Concentration Value 750 parts per million | 1995-03-01 |
| | | Immediately Dangerous to Life or Health Concentration Value 750 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. Full-Face Air-Purifying Respirator for Organic Vapors, Dusts and Mists. 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.
- 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.

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

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**

Physical state : liquid
Color : Colorless
Odor : gasoline-like

Safety data

Flash point : -8°C (18°F)
Method: Tag closed cup

Lower explosion limit : 1 %(V)

Upper explosion limit : 7 %(V)

Oxidizing properties : No

Autoignition temperature : No data available

Molecular formula : Mixture

Molecular weight : Not applicable

pH : Not applicable

Freezing point : No data available

Pour point : No data available

Boiling point/boiling range : 96-103°C (205-217°F)

Vapor pressure : 1.70 PSI
at 37.8°C (100.0°F)

Relative density : 0.693
at 15.6 °C (60.1 °F)

Water solubility : negligible

Partition coefficient: n-
octanol/water : No data available

Viscosity, kinematic : No data available

Relative vapor density : 3
(Air = 1.0)

Evaporation rate : 1

Percent volatile : > 99 %

Conductivity : No data available

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

SECTION 10: Stability and reactivity

Reactivity : Stable under recommended storage conditions.

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

Hazardous reactions : Hazardous reactions: Hazardous polymerization does not occur.

Hazardous reactions: Vapors may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous decomposition products : Carbon oxides

Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**TrusTec™ PRF Octane Blend No.80**

Acute oral toxicity : LD50: > 5,000 mg/kg
Species: Rat
Method: Acute toxicity estimate

TrusTec™ PRF Octane Blend No.80

Acute inhalation toxicity : LC50: > 20 mg/l
Species: Rat
Test atmosphere: dust/mist
Method: Acute toxicity estimate

Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute toxicity estimate: 24.9 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

TrusTec™ PRF Octane Blend No.80

Acute dermal toxicity : LD50: > 2,000 mg/kg
Species: Rabbit
Method: Acute toxicity estimate

TrusTec™ PRF Octane Blend No.80

Skin irritation : Skin irritation
largely based on animal evidence.
May cause skin irritation in susceptible persons.

TrusTec™ PRF Octane Blend No.80

Eye irritation : No eye irritation
largely based on animal evidence.
Vapors may cause irritation to the eyes, respiratory system
and the skin.

TrusTec™ PRF Octane Blend No.80

Sensitization : Did not cause sensitization on laboratory animals.

Repeated dose toxicity

2,2,4-Trimethylpentane
(Isooctane) : Species: Rat, Male and female
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.

n-Heptane

Species: Rat, male
Sex: male
Application Route: Inhalation
Dose: 12.47 mg/l
Exposure time: 16 wk
Number of exposures: 12 h/d, 7 d/wk
NOEL: 12.47 mg/l
No adverse effect has been observed in chronic toxicity tests.

Species: Rat, Male and female
Sex: Male and female
Application Route: Inhalation
Dose: 12.35 mg/l
Exposure time: 26 wk
Number of exposures: 6 h/d, 5 d/wk
Method: OECD Test Guideline 413
No adverse effect has been observed in chronic toxicity tests.

Genotoxicity in vitro

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

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

n-Heptane

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

Test Type: Ames test
Method: Mutagenicity (Escherichia coli - reverse mutation assay)
Result: negative

Test Type: Mammalian cell gene mutation assay
Method: OECD Guideline 476
Result: negative

Test Type: Chromosome aberration test in vitro
Method: OECD Guideline 473
Result: negative

Test Type: Mitotic recombination
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

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.

n-Heptane

Species: Rat
Sex: male and female
Application Route: Inhalation
Dose: 0, 900, 3000, 9000 ppm
Number of exposures: 6 hr/d, 5 d/wk
Test period: 13 wk
Method: OECD Test Guideline 416

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

NOAEL Parent: 3000ppm
 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
 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.

n-Heptane : Species: Rat
 Application Route: Inhalation
 Dose: 0, 900, 3000, 9000 ppm
 Exposure time: GD6-15
 Number of exposures: 6 hrs/d
 NOAEL Teratogenicity: 9000 ppm
 NOAEL Maternal: 3000 ppm

TrusTec™ PRF Octane Blend No.80

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.

n-Heptane : 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: No toxicity to reproduction

TrusTec™ PRF Octane Blend No.80

Further information : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

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

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

2,2,4-Trimethylpentane (Isooctane) : LC50: 0.11 mg/l
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.

n-Heptane LL50: 5.738 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
Method: QSAR modeled data

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.

n-Heptane EC50: 1.5 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
static test Toxic to aquatic organisms.

LC50: 0.1 mg/l
Exposure time: 96 h
Species: Mysidopsis bahia (mysid shrimp)
semi-static test Very toxic to aquatic organisms.

Toxicity to algae

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

n-Heptane EL50: 4.338 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (microalgae)
Method: QSAR

Toxicity to fish (Chronic toxicity)

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

n-Heptane : NOELR: 1.284 mg/l
 Exposure time: 28 d
 Species: Oncorhynchus mykiss (rainbow trout)
 Method: QSAR modeled data

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

2,2,4-Trimethylpentane (Isooctane) : Result: Not readily biodegradable.
 Method: OECD Test Guideline 301
 Expected to be inherently biodegradable.
 Information given is based on data obtained from similar substances.

n-Heptane : Result: Readily biodegradable.
 70 %
 Testing period: 10 d

Bioaccumulation

2,2,4-Trimethylpentane (Isooctane) : Bioconcentration factor (BCF): 231
 Method: QSAR modeled data
 This material is not expected to bioaccumulate.

n-Heptane : Bioconcentration factor (BCF): 552
 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.

n-Heptane : Medium: Air
 Method: Calculation, Mackay Level I Fugacity Model
 Content: 100 %
 After release, disperses into the air.

Results of PBT assessment

2,2,4-Trimethylpentane (Isooctane) : Non-classified PBT substance, Non-classified vPvB substance

n-Heptane : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information : Very toxic to aquatic life with long lasting effects.

Ecotoxicology Assessment

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

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)

UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, MARINE POLLUTANT, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), N-HEPTANE), RQ (2,2,4-TRIMETHYLPENTANE (ISOOCTANE))

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, (-8 °C c.c.), MARINE POLLUTANT, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), N-HEPTANE)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II

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

UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), N-HEPTANE)

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

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

33,UN1268,PETROLEUM PRODUCTS, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), N-HEPTANE)

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

UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), N-HEPTANE)

Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information**National legislation**

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Aspiration hazard
Skin corrosion or irritation
Specific target organ toxicity (single or repeated exposure)

CERCLA Reportable Quantity : 1248 lbs
2,2,4-Trimethylpentane (Isooctane)

SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.

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

SARA 304 Reportable Quantity : This material does not contain any components with a section 304 EHS RQ.

SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

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 Intermediate or Final VOC's (40 CFR 60.489).

US State Regulations**Pennsylvania Right To Know**

: 2,2,4-Trimethylpentane (Isooctane) - 540-84-1
n-Heptane - 142-82-5

California Prop. 65 Components

: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Notification status

Europe REACH : This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH).
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
Australia AIIC : On the inventory, or in compliance with the inventory
New Zealand NZIoC : Not in compliance with the inventory
Japan ENCS : On the inventory, or in compliance with the inventory
Korea KECI : All substances in this product were registered, notified to be registered, or exempted from registration by CPChem through an Only Representative according to K-REACH regulations. Importation of this product is permitted if the Korean Importer of Record was included on CPChem's notifications or if the Importer of Record themselves notified the substances.

TrusTec™ PRF Octane Blend No.80

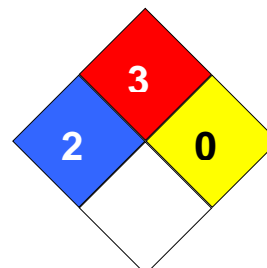
Version 1.3

Revision Date 2023-09-20

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

SECTION 16: Other information

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

**Further information**

Legacy SDS Number : 28440

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% |
| AIIC | Australian Inventory of Industrial Chemicals | 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 |

TrusTec™ PRF Octane Blend No.80

Version 1.3

Revision Date 2023-09-20

| | | | |
|-------|--|-------|--|
| | | | 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 New Chemical Substances | TSCA | Toxic Substance Control Act |
| 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% | ATE | Acute toxicity estimate |