

TrusTec[™] PRF Octane No. Blends 80-98

Version 1.13

Revision Date 2022-11-17

according to GB/T 16483 and GB/T 17519

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

Product information

Product Name Material	 TrusTec[™] PRF Octane No. Blends 80-98 1024452, 1024451, 1024450, 1024448, 1024447, 1024446, 1024444, 1024443, 1024442, 1024440, 1024439, 1024438, 1024436, 1024435, 1024434, 1024432, 1024431, 1024430, 1024428, 1024427, 1024426, 1024424, 1024423, 1024422, 1024420, 1024419, 1024418, 1024416, 1024415, 1024414, 1024412, 1024411, 1024410, 1024408, 1024407, 1024406, 1024404, 1024403, 1024402, 1024400, 1024399, 1024398, 1024396, 1024395, 1024394, 1024392, 1024391, 1024390, 1024388, 1024384, 1024383, 1024382, 1024381, 1024380, 1024379, 1024378, 1024341, 1024445, 1024441, 1024437, 1024433, 1024429, 1024425, 1024445, 1024441, 1024437, 1024433, 1024429, 1024425, 1024421, 1024342, 1024417, 1024433, 10244385
Use	: Reference Fuel
Company	 Chevron Phillips Chemical Company LP Specialty Chemicals 10001 Six Pines Drive The Woodlands, TX 77380
Local	 Chevron Phillips Chemicals (Shanghai) Corporation Room 1810-1812, Shanghai Mart, 2299 Yan An Road (W), Shanghai, PRC 200336 Tel: (86-21) 22157200
Emergency telephone:	
Asia: CHEMWATCH Mexico CHEMTREC South America SOS-	national) .9300 or 703.527.3887(int'l) (+612 9186 1132) China: 0532 8388 9090 D1-800-681-9531 (24 hours) Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
SDS Number:100000014260	1/16

Version 1.13

Revision Date 2022-11-17

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) Greec: (0030) 210779377 (24 hours/day), 7 days/week) Iceland: 543 2222 (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) 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, Hipokräta 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: +362 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
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 GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)

Emergency Overview

Physical state: liquid	Color: Colorless Odor: gasoline-like
Hazards	: Highly flammable liquid and vapor. Causes skin irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Classification	

TrusTec™ PRF Octane No. Blends 80-98

sion 1.13	Revision Date 2022-11-
	 Flammable liquids, Category 2 Skin corrosion/irritation, Category 2 Specific target organ toxicity - single exposure, Category 3, Narcotic effects Aspiration hazard, Category 1 Short-term (acute) aquatic hazard, Category 1 Long-term (chronic) aquatic 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. H410: Very toxic to aquatic life with long lasting effects.
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. P264: Wash skin thoroughly after handling. P273: Avoid release to the environment. P280: Wear protective gloves/ 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. P331: Do NOT induce vomiting. P362+P364: Take off contaminated clothing and wash it before reuse. P370+P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P391: Collect spillage. Storage: P403 + P233: Store in a well-ventilated place. Keep cool. Disposal:

Version 1.13

Revision Date 2022-11-17

SAFETY DATA SHEET

Synonyms	:		eference Fuel	
			eference Fuel	
Molecular formula	•	Mixture		
Chemical name			CAS-No. / EINECS-No.	Concentration
2,2,4-Trimethylpentane (Isoo n-Heptane	octa	ane)	540-84-1 142-82-5	[wt%] 80 - 98 0 - 20
FION 4: First aid measures				0 20
General advice	:	sheet to th	of dangerous area. Show this ne doctor in attendance. Mate otentially fatal pneumonia if sv	rial may produce a
f inhaled	:		physician after significant expectovery position and seek med	
n case of skin contact	:		ation persists, call a physician. . If on clothes, remove clothe	
n case of eye contact	:	lenses. P	s with water as a precaution. rotect unharmed eye. Keep e eye irritation persists, consult	ye wide open while
f swallowed	:	an uncons	iratory tract clear. Never give cious person. If symptoms pe n immediately to hospital.	
ΓΙΟΝ 5: Firefighting measu	res			
Flash point	:	-8°C (18° Method: T	F) ag closed cup	
Autoignition temperature	:	No data av	/ailable	
Suitable extinguishing nedia	:	Alcohol-re	sistant foam. Carbon dioxide	(CO2). Dry chemical.
Jnsuitable extinguishing nedia	:	High volur	ne water jet.	
Specific hazards during fire ighting	:	Do not allo courses.	ow run-off from fire fighting to	enter drains or water
Special protective equipment for fire-fighters	:	Wear self- necessary	contained breathing apparatu	s for firefighting if

		o. Blends 80-98
sion 1.13		Revision Date 2022-11-
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.
Hazardous decomposition products	:	Carbon oxides.
CTION 6: Accidental release	mea	asures
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).
CTION 7: Handling and stora	ge	
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		

		SAFETY DATA SHEET
TrusTec [™] PRF Octan	e N	lo. Blends 80-98
Version 1.13		Revision Date 2022-11-17
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

CN

Components	Basis	Value	Control parameters	Note
n-Heptane	CN OEL	PC-TWA	500 mg/m3	
	CN OEL	PC-STEL	1,000 mg/m3	

Not applicable

Engineering measures

Adequate ventilation to control airborned 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.
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.
SDS Number:100000014260		6/16

ion 1.13	Revision Date 2022-
Hygiene measures	: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
TION 9: Physical and chem	lical properties
Information on basic phys	ical and chemical properties
Appearance	
Physical state Color Odor	: liquid : Colorless : 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
рН	: 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-	: No data available
octanol/water Viscosity, kinematic	: No data available
Relative vapor density	: 3 (Air = 1.0)
Evaporation rate	: 1
Percent volatile	: >99 %

Version 1.13

	vity
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 rea	ctions
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.
TION 11: Toxicological infor	mation
Acute oral toxicity	
2,2,4-Trimethylpentane (Isooctane)	: LD50: > 5,000 mg/kg Species: Rat Sex: male and female Method: OECD Test Guideline 401 Symptoms: Salivation
2,2,4-Trimethylpentane	Species: Rat Sex: male and female Method: OECD Test Guideline 401
2,2,4-Trimethylpentane (Isooctane)	Species: Rat Sex: male and female Method: OECD Test Guideline 401 Symptoms: Salivation LD50: > 5,000 mg/kg Species: Rat Method: OECD Test Guideline 401 Information given is based on data obtained from similar
2,2,4-Trimethylpentane (Isooctane) n-Heptane	Species: Rat Sex: male and female Method: OECD Test Guideline 401 Symptoms: Salivation LD50: > 5,000 mg/kg Species: Rat Method: OECD Test Guideline 401 Information given is based on data obtained from similar

TrusTec™ PRF Octane No. Blends 80-98

Version 1.13

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(Isooctane) Species: Rabbit Sex: male and female Method: OECD Test Guideline 402 TrusTec™ PRF Octane No. Blends 80-98 Skin irritation : Skin irritation largely based on animal evidence. TrusTec™ PRF Octane No. Blends 80-98 Eye irritation : Vapors may cause irritation to the of and the skin. TrusTec™ PRF Octane No. Blends 80-98 Eye irritation : Uapors may cause irritation to the of and the skin. TrusTec™ PRF Octane No. Blends 80-98 Sensitization : Did not cause sensitization on labo 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 NOEL: 8.117 mg/l 2220 ppm Method: OECD Guideline 413 Information given is based on data 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/n No adverse effect has been observ 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/w Method: OECD Test Guideline 413 No adverse effect has been observ	
Skin irritation : Skin irritation largely based on animal evidence. TrusTec™ PRF Octane No. Blends 80-98 Eye irritation : Vapors may cause irritation to the orand the skin. TrusTec™ PRF Octane No. Blends 80-98 Sensitization : Did not cause sensitization on labor 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 NOEL: 8.117 mg/l 2220 ppm Method: OECD Guideline 413 Information given is based on data substances. n-Heptane Species: Rat, male Sex: male Application Route: Inhalation Dose: 12.47 mg/l No adverse effect has been observed. Species: Rat, Male and female Species: Rat, Male and female Application Route: Inhalation Dose: 12.35 mg/l Exposure time: 26 wk Number of exposures: 6 h/d, 5 d/w. Number of exposures: 6 h/d, 5 d/w. Method: OECD Test Guideline 413 No adverse effect has been observed. No adverse effect has been observed. <	
Eye irritation : Vapors may cause irritation to the early and the skin. TrusTec™ PRF Octane No. Blends 80-98 : Did not cause sensitization on labor Sensitization : Did not cause sensitization on labor 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 NOEL: 8.117 mg/l 2220 ppm Method: OECD Guideline 413 Information given is based on data 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/m NOEL: 12.47 mg/l No adverse effect has been observer. Species: Rat, Male and female Sex: Male Sex Male Se	
Sensitization : Did not cause sensitization on labor 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 NOEL: 8.117 mg/l 2220 ppm Method: OECD Guideline 413 Information given is based on data 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/v NOEL: 12.47 mg/l No adverse effect has been observ. Species: Rat, Male and female Sex: 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/w Method: OECD Test Guideline 413 No adverse effect has been observ.	eyes, respiratory system
 2,2,4-Trimethylpentane (Isooctane) : Species: Rat, Male and female Application Route: Inhalation Dose: 0, 668, 2220, 6646 ppm Exposure time: 13 weeks Number of exposures: 6 hr/day 5 d NOEL: 8.117 mg/l 2220 ppm Method: OECD Guideline 413 Information given is based on data 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/A NOEL: 12.47 mg/l No adverse effect has been observ 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/w Method: OECD Test Guideline 413 No adverse effect has been observ 	ratory animals.
(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 NOEL: 8.117 mg/l 2220 ppm Method: OECD Guideline 413 Information given is based on data substances. Noether 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/x No EL: 12.47 mg/l No adverse effect has been observed Species: Rat, Male and female Sex: 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/w Method: OECD Test Guideline 413 No adverse effect has been observed	
Sex: male Application Route: Inhalation Dose: 12.47 mg/l Exposure time: 16 wk Number of exposures: 12 h/d, 7 d/v NOEL: 12.47 mg/l No adverse effect has been observ 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/w Method: OECD Test Guideline 413 No adverse effect has been observ Genotoxicity in vitro	
Method: OECD Test Guideline 413 No adverse effect has been observ Genotoxicity in vitro	ved in chronic toxicity tests
-	}
2.2.4 Trimethylaentene L. Teet Type, American	
2,2,4-Trimethylpentane : Test Type: Ames test (Isooctane) Method: Mutagenicity (Escherichia assay) Result: negative	coli - reverse mutation
S Number:100000014260 9/16	

TrusTec™ PRF Octane No. Blends 80-98

sion 1.13	Revision Date 2022-11-
	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
n-Heptane	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
S Number:100000014260	10/16

ion 1.13	Revision Date 2022-7	
	NOAEL Parent: 9000 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 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 No		
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 No	. Blends 80-98	
	: Symptoms of overexposure may be headache, dizziness,	

TrusTec[™] PRF Octane No. Blends 80-98

Version 1.13

Revision Date 2022-11-17

above the TLV value may cause narcotic effects. Solvents may degrease 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 oth	er 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 to	xicity)	

sTec™ PRF Octane	NO. Biends 80-98		
ion 1.13	Revision Date 2022-1		
n-Heptane	: NOELR: 1.284 mg/l Exposure time: 28 d Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data		
Toxicity to daphnia and othe	r 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 Ecotoxicology Assessment	: Very toxic to aquatic life with long lasting effects.		
Number:100000014260	13/16		

TrusTec[™] PRF Octane No. Blends 80-98

Version 1.13

Short-term (acute) aquatic ha 2,2,4-Trimethylpentane (Isooctane) n-Heptane Long-term (chronic) aquatic h 2,2,4-Trimethylpentane (Isooctane) n-Heptane	: Very toxic to aquatic life.: Very toxic to aquatic life.			
SECTION 13: Disposal consider	ations			
The information in this SDS p	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 informa	tion			
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 DISTILLATES, N.O.S., 3, II, MARINE POLLUTANT, (2,2,4- TRIMETHYLPENTANE (ISOOCTANE), N-HEPTANE)				
IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS) UN1268, PETROLEUM DISTILLATES, 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 DISTILLATES, N.O.S., 3, II				
SDS Number:100000014260	14/16			

Version 1.13

ATES, N.O.S., 3, II, (D/E), ENVIRONMENTALLY (LPENTANE (ISOOCTANE), N-HEPTANE) G THE INTERNATIONAL TRANSPORT OF LATES, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, DOCTANE), N-HEPTANE) ONCERNING THE INTERNATIONAL CARRIAGE AND WATERWAYS)
ATES, N.O.S., 3, II, (D/E), ENVIRONMENTALLY 'LPENTANE (ISOOCTANE), N-HEPTANE) G THE INTERNATIONAL TRANSPORT OF LATES, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, DOCTANE), N-HEPTANE) ONCERNING THE INTERNATIONAL CARRIAGE
(LPENTANE (ISOOCTANE), N-HEPTANE) G THE INTERNATIONAL TRANSPORT OF LATES, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, DOCTANE), N-HEPTANE) ONCERNING THE INTERNATIONAL CARRIAGE
G THE INTERNATIONAL TRANSPORT OF LATES, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, DOCTANE), N-HEPTANE) ONCERNING THE INTERNATIONAL CARRIAGE
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OOCTANE), N-HEPTANE)
ONCERNING THE INTERNATIONAL CARRIAGE
ATES, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (2,2
ANE), N-HEPTANE)
ing to IMO instruments
0
Primary label: Combustible Liquid.
,
ted Toxic Chemicals Regulation for Environmental
Chemicals and the Import & Export of Toxic Chemicals,
• •
Severely restricted.
: This product is in full compliance according to REACH
regulation 1907/2006/EC.
: On the inventory, or in compliance with the inventory
: On or in compliance with the active portion of the
TSCA inventory
: On the inventory, or in compliance with the inventory
: On the inventory, or in compliance with the inventory
: On the inventory, or in compliance with the inventory
: 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.
: On the inventory, or in compliance with the inventory
: On the inventory, or in compliance with the inventory
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 On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory Law on the Prevention and Control of Occupational

TrusTec[™] PRF Octane No. Blends 80-98

Version 1.13

Revision Date 2022-11-17

SECTION 16: Other information

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.

k	Key or legend to abbreviations and a	cronyms used	d 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 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

SDS Number:100000014260