


**PRF Octane No. Blends (60, 80-99)**

Version 1.5

Revision Date 2011-02-23

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**Product information**

Trade name : PRF Octane No. Blends (60, 80-99)  
 Material : 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, 1024376, 1024372, 1024341, 1024340,  
 1024339, 1024386, 1024387, 1024453, 1024449, 1024445,  
 1024441, 1024437, 1024433, 1024429, 1024425, 1024421,  
 1024342, 1024417, 1024413, 1024409, 1024405, 1024401,  
 1024397, 1024393, 1024389, 1024385, 1024377, 1024375,  
 1024374

**EC-No.Registration number**

Chemical Name	CAS-No. Index-No.	Registration number
2,2,4-Trimethylpentane (Isooctane)	540-84-1 601-009-00-8	01-2119457965-22-0002
n-Heptane	142-82-5 601-008-00-2	01-2119457603-38-0002

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

**Local** : Chevron Phillips Chemicals International N.V.  
 Brusselsesteenweg 355  
 B-3090 Overijse  
 Belgium

MSDS Requests: (800) 852-5530  
 Technical Information: (832) 813-4862  
 Responsible Party: Product Safety Group  
 Email:msds@cpchem.com

**Emergency telephone:**

**Health:**  
 866.442.9628 (North America)  
 1.832.813.4984 (International)

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**Transport:**

North America: CHEMTREC 800.424.9300 or 703.527.3887

Asia: +800 CHEMCALL (+800 2436 2255) China: 0532.8388.9090

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

Chemcare Asia: Tel: +65 6848 9048 - Mob: +65 8382 9188 - Fax: +65 6848

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

Responsible Department : Product Safety and Toxicology Group

E-mail address : MSDS@CPChem.com

Website : www.CPChem.com

**2. HAZARDS IDENTIFICATION****Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Flammable liquids, Category 2

Skin irritation, Category 2

Specific target organ systemic toxicity -  
single exposure, Category 3

Aspiration hazard, Category 1

Acute aquatic toxicity, Category 1

Chronic aquatic toxicity, Category 1

H225: Highly flammable liquid and vapor.

H315: Causes skin irritation.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

H304: May be fatal if swallowed and enters  
airways.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting  
effects.**Classification (67/548/EEC, 1999/45/EC)**

Highly flammable

Harmful

Irritant

Dangerous for the environment

R11: Highly flammable.

R65: Harmful: may cause lung damage if  
swallowed.

R38: Irritating to skin.

R50/53: Very toxic to aquatic organisms, may  
cause long-term adverse effects in the aquatic  
environment.

R67: Vapors may cause drowsiness and dizziness.

**Label elements****Labeling (REGULATION (EC) No 1272/2008)**

Hazard pictograms



Signal Word

: Danger

Hazard Statements

: H225  
H304Highly flammable liquid and vapor.  
May be fatal if swallowed and enters  
airways.

H315

Causes skin irritation.

H335

May cause respiratory irritation.

H336

May cause drowsiness or dizziness.

H410

Very toxic to aquatic life with long lasting  
effects.

Precautionary Statements

: **Prevention:**  
P210Keep away from heat/sparks/open  
flames/hot surfaces. - No smoking.

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P233 Keep container tightly closed.  
 P240 Ground/bond container and receiving equipment.  
 P243 Take precautionary measures against static discharge.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**  
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Do NOT induce vomiting.

**Storage:**  
 P403 + P235 Store in a well-ventilated place. Keep cool.

Hazardous ingredients which must be listed on the label:

- 540-84-1 2,2,4-Trimethylpentane (Isooctane)

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Primary Reference Fuel  
 60,80-99 Octane Reference Fuel

Molecular formula : Mixture

**Mixtures****Hazardous ingredients**

Chemical Name	CAS-No. EINECS-No.	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
2,2,4-Trimethylpentane (Isooctane)	540-84-1 208-759-1	F; R11 Xn; R65 Xi; R38 R67 N; R50-R53	Asp. Tox. 1; H304 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336	60 - 100
n-Heptane	142-82-5 205-563-8	F; R11 Xn; R65 Xi; R38 R67 N; R50-R53	Asp. Tox. 1; H304 Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	30 - 60

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2,2,4-Trimethylpentane (Isooctane)	540-84-1 208-759-1	01-2119457965-22-0002
n-Heptane	142-82-5 205-563-8	01-2119457603-38-0002

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

**4. FIRST AID MEASURES**

- General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Symptoms of poisoning may only appear several hours later. Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.
- 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. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

**5. FIRE-FIGHTING MEASURES**

- Flash point : -8 °C (18 °F)  
Method: Tag closed cup
- Autoignition temperature : No data available
- 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 fire fighting 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.

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- Fire and explosion protection : Do not spray on an open flame or any other 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.

**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).

**7. HANDLING AND STORAGE****Handling**

- Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. 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 an open flame or any other 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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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters****Chevron Phillips Chemical Company LP**

Ingredients	Basis	Value	Control parameters	Note
2,2,4-Trimethylpentane (Isooctane)	Manufacturer	TWA	300 ppm,	

**IT**

Componenti	Base	Valore	Parametri di controllo	Nota
n-Heptane	IT OEL	TWA	500 ppm, 2.085 mg/m3	

**LT**

Komponentai	Pagrindas, bazė	Vertė	Kontrolės parametrai	Pastaba
n-Heptane	LT OEL	IPRD	500 ppm, 2.085 mg/m3	
	LT OEL	TPRD	750 ppm, 3.128 mg/m3	

**LU**

Composants	Base	Valeur	Paramètres de contrôle	Note
n-Heptane	LU OEL	TWA	500 ppm, 2.085 mg/m3	

**LV**

Sastāvdaļas	Bāze	Vērtība	Pārvaldības parametri	Piezīme
n-Heptane	LV OEL	AER 8 st	85 ppm, 350 mg/m3	
	LV OEL	AER īslaicīgā	500 ppm, 2.085 mg/m3	

**NL**

Bestanddelen	Basis	Waarde	Controleparameters	Opmerking
n-Heptane	NL MAC	TGG-8 uur	1.200 mg/m3	
	NL MAC	TGG-15 min	1.600 mg/m3	

**PL**

Składniki	Podstawa	Wartość	Parametry dotyczące kontroli	Uwaga
n-Heptane	PL NDS	NDS	1.200 mg/m3	
	PL NDS	NDSch	2.000 mg/m3	

**PT**

Componentes	Bases	Valor	Parâmetros de controlo	Nota
n-Heptane	PT OEL	VLE-MP	400 ppm,	(1),
	PT OEL	VLE_CD	500 ppm,	(1),

(1) Abrangido por legislação nacional específica ou por legislação comunitária não transposta

**SE**

Beståndsdelar	Grundval	Värde	Kontrollparametrar	Anmärkning
n-Heptane	SE AFS	NGV	200 ppm, 800 mg/m3	
	SE AFS	KTV	300 ppm, 1.200 mg/m3	

**SI**

Komponente	Osnova	Vrednost	Parametri nadzora	Pripomba
n-Heptane	SI OEL	MV	500 ppm, 2.085 mg/m3	EU,

EU European Union - mejna vrednost določena na ravni Evropske unije

**SK**

Súčasť	Podstata	Hodnota	Kontrolné parametre	Poznámka
n-Heptane	SK OEL	NPEL	500 ppm, 2.085 mg/m3	

**AT**

Inhaltsstoffe	Basis	Wert	Zu überwachende Parameter	Bemerkung
n-Heptane	AT OEL	TMW	500 ppm, 2.000 mg/m3	
	AT OEL	KZW	2.000 ppm, 8.000 mg/m3	

**BE**

Bestanddelen	Basis	Waarde	Controleparameters	Opmerking
n-Heptane	BE OEL	TGG 8 hr	400 ppm, 1.664 mg/m3	
	BE OEL	TGG 15 min	500 ppm, 2.085 mg/m3	

**CZ**

Složky	Základ	Hodnota	Kontrolní parametry	Poznámka
n-Heptane	CZ OEL	PEL	1.000 mg/m3	
	CZ OEL	NPK-P	2.000 mg/m3	

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**DK**

Komponenter	Basis	Værdi	Kontrolparametre	Note
n-Heptane	DK OEL	GV	200 ppm, 820 mg/m <sup>3</sup>	E,

E At stoffet har en EF-grænseværdi

**EE**

Komponendid, osad	Alused	Väärtus	Kontrolliparameetrid	Märkused
n-Heptane	EE OEL	Piirnorm	500 ppm, 2.085 mg/m <sup>3</sup>	

**ES**

Componentes	Base	Valor	Parámetros de control	Nota
n-Heptane	ES VLA	VLA-ED	500 ppm, 2.085 mg/m <sup>3</sup>	VLI,

VLI Agente químico que tiene establecido un valor límite indicativo por la UE.

**FI**

Aineosat	Peruste	Arvo	Valvontaa koskevat muuttujat	Nota
2,2,4-Trimethylpentane (Isooctane)	FI OEL	HTP-arvot 8h	300 ppm, 1.400 mg/m <sup>3</sup>	
	FI OEL	HTP-arvot 15 min	380 ppm, 1.800 mg/m <sup>3</sup>	
n-Heptane	FI OEL	HTP-arvot 8h	300 ppm, 1.200 mg/m <sup>3</sup>	
	FI OEL	HTP-arvot 15 min	500 ppm, 2.100 mg/m <sup>3</sup>	

**FR**

Composants	Base	Valeur	Paramètres de contrôle	Note
n-Heptane	FR VLE	VME	400 ppm, 1.668 mg/m <sup>3</sup>	zwart/vet,
	FR VLE	VLCT (VLE)	500 ppm, 2.085 mg/m <sup>3</sup>	zwart/vet,

zwart/vet Valeurs limites réglementaires contraignantes

**GB**

Ingredients	Basis	Value	Control parameters	Note
n-Heptane	GB EH40	TWA	500 ppm,	2,

2 Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

**GR**

Συστατικά	Βάση	Τιμή	Παράμετροι ελέγχου	Σημείωση
n-Heptane	GR OEL	TWA	500 ppm, 2.000 mg/m <sup>3</sup>	
	GR OEL	STEL	500 ppm, 2.000 mg/m <sup>3</sup>	

**HU**

Komponensek	Bázis	Érték	Ellenőrzési paraméterek	Megjegyzés
n-Heptane	HU OEL	AK-érték	2.000 mg/m <sup>3</sup>	*, EU3,
	HU OEL	CK-érték	8.000 mg/m <sup>3</sup>	*, EU3,

\* Európai "indikatív" határértékek (96/94/EK, 2000/39/EK), amelyeknél nincs csúcskoncentráció megadva. Ezekben az esetekben jelen melléklet 1.3. pontja szerint kell eljárni  
EU3 2000/39/EK irányelvben közölt érték

**IE**

Ingredients	Basis	Value	Control parameters	Note
n-Heptane	IE OEL	OELV - 8 hrs (TWA)	400 ppm, 1.600 mg/m <sup>3</sup>	IOELV,

IOELV Indicative Occupational Exposure Limit Value

**Personal protective equipment**

- Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.
- Skin and body protection : Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

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**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)

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 %

**10. STABILITY AND REACTIVITY****Possibility of hazardous reactions**

Conditions to avoid : Heat, sparks, fire, and oxidizing agents.  
 Heat, flames and sparks.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as



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chlorates, nitrates, peroxides, etc.

Other data : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.  
No decomposition if stored and applied as directed.

**11. TOXICOLOGICAL INFORMATION****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

n-Heptane : LD50: > 5.000 mg/kg  
Species: rat  
Method: OECD Test Guideline 401  
Information given is based on data obtained from similar substances.

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Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l  
Method: Calculation method

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Acute dermal toxicity : LD50: > 2.000 mg/kg  
Species: rabbit

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Skin irritation : May cause skin irritation in susceptible persons.

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

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Sensitization : No adverse effects expected.

**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

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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.

**Reproductive toxicity**

2,2,4-Trimethylpentane  
 (Isooctane)

: Species: rat  
 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

n-Heptane

Species: rat  
 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  
 NOAEL Parent: 9000 ppm  
 NOAEL F1: 3000 ppm  
 NOAEL F2: 3000 ppm

**Teratogenicity**

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

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

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

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Aspiration toxicity

: May be fatal if swallowed and enters airways.  
 Substances known to cause human aspiration toxicity hazards  
 or to be regarded as if they cause human aspiration toxicity

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hazard.

**CMR effects**

2,2,4-Trimethylpentane (Isooctane) : Carcinogenicity: Not available  
 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 : Carcinogenicity: Not available  
 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

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Further information : Solvents may degrease the skin.

**12. ECOLOGICAL INFORMATION****Toxicity to fish**

2,2,4-Trimethylpentane (Isooctane) : LC50: 0,11 mg/l  
 Exposure time: 96 HR  
 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: 1,284 mg/l  
 Exposure time: 96 HR  
 Species: Oncorhynchus mykiss (rainbow trout)  
 Method: QSAR

**Toxicity to daphnia and other aquatic invertebrates.**

2,2,4-Trimethylpentane (Isooctane) : EC50: 0,4 mg/l  
 Exposure time: 48 HR  
 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 HR  
 Species: Daphnia magna (Water flea)  
 static test Toxic to aquatic organisms.

LC50: 0,1 mg/l  
 Exposure time: 96 HR  
 Species: Mysidopsis bahia (mysid shrimp)  
 semi-static test Very toxic to aquatic organisms.

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**Toxicity to algae**

2,2,4-Trimethylpentane (Isooctane) : EL50: 2,943 mg/l  
Exposure time: 72 HR  
Method: QSAR modeled data

n-Heptane : EL50: 4,338 mg/l  
Exposure time: 72 HR  
Species: Pseudokirchneriella subcapitata  
Method: QSAR

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

2,2,4-Trimethylpentane (Isooctane) : NOEC: 0,17 mg/l  
Exposure time: 21 D  
Species: Daphnia magna (Water flea)

**Elimination information (persistence and degradability)****Bioaccumulation**

2,2,4-Trimethylpentane (Isooctane) : Bioconcentration factor (BCF): 231  
Method: Estimated based on individual component values.

Biodegradability : not applicable

**Further information on ecology****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** : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Very toxic to aquatic life with long lasting effects.

**13. DISPOSAL CONSIDERATIONS**

The information in this MSDS 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.

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Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

**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 MSDS and the bill of lading.

**USDOT**

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, RQ (2,2,4-TRIMETHYLPENTANE (ISOOCTANE))

**IMO / IMDG**

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, MP (2,2,4-TRIMETHYLPENTANE (ISOOCTANE)), (-8 °C)

**IATA**

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

**ADR**

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

**RID**

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

**15. REGULATORY INFORMATION****National legislation**

Major Accident Hazard Legislation	: 96/82/EC	Update: 2003
	Highly flammable	
	7b	
	Quantity 1: 5.000 t	
	Quantity 2: 50.000 t	
	: 96/82/EC	Update: 2003
	Dangerous for the environment	
	9a	
	Quantity 1: 100 t	
	Quantity 2: 200 t	

**Notification status**

Europe REACH	: On the inventory, or in compliance with the inventory
United States of America US.TSCA	: On the inventory, or in compliance with the inventory
Canada DSL	: On the inventory, or in compliance with the inventory
Australia AICS	: On the inventory, or in compliance with the inventory
New Zealand NZIoC	: On the inventory, or in compliance with the inventory
Japan ENCS	: On the inventory, or in compliance with the inventory
Korea KECI	: On the inventory, or in compliance with the inventory

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Version 1.5

Revision Date 2011-02-23

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

**16. OTHER INFORMATION****Further information**

Legacy MSDS Number : 28440

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

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

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LOAEL	Lowest Observed Adverse Effect Level
AICS	Australia, Inventory of Chemical Substances	NFPA	National Fire Protection Agency
DSL	Canada, Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
NDSL	Canada, Non-Domestic Substances List	NTP	National Toxicology Program
CNS	Central Nervous System	NZIoC	New Zealand Inventory of Chemicals
CAS	Chemical Abstract Service	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration	NOEC	No Observed Effect Concentration
EC50	Effective Concentration 50%	OSHA	Occupational Safety & Health Administration
EINECS	European Inventory of Existing Chemical Substances	PEL	Permissible Exposure Limit
MAK	Germany Maximum Concentration Values	PICCS	Philippines Inventory of Commercial Chemical Substances
GHS	Globally Harmonized System	PRNT	Presumed Not Toxic
>=	Greater Than or Equal To	RCRA	Resource Conservation Recovery Act
IC50	Inhibition Concentration 50%	STEL	Short-term Exposure Limit
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act.
IECSC	Inventory of Existing Chemical Substances in China	TLV	Threshold Limit Value
ENCS	Japan, Inventory of Existing and New Chemical Substances	TWA	Time Weighted Average
KECI	Korea, Existing Chemical Inventory	TSCA	Toxic Substance Control Act
<=	Less Than or Equal To	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
LC50	Lethal Concentration 50%	WHMIS	Workplace Hazardous Materials Information System
LD50	Lethal Dose 50%		

**Full text of R-phrases referred to under sections 2 and 3**

R11 Highly flammable.

**PRF Octane No. Blends (60, 80-99)**

Version 1.5

Revision Date 2011-02-23

R38	Irritating to skin.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.

**Full text of H-Statements referred to under sections 2 and 3.**

H225	Highly flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.