

Version 1.3 Revision Date 2016-07-11

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

Product information

Product Name : Unit 26 CC Cut #1

Material : 1032781, 1029748, 1030177, 1020454

Use : Feedstock

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: +800 CHEMCALL (+800 2436 2255) China:+86-21-22157316 EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

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 : 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.

Emergency Overview

Danger

Form: Liquid Physical state: Liquid

OSHA Hazards : Flammable Liquid, Moderate skin irritant, Carcinogen,

Reproductive hazard, Target Organ Effects, Aspiration hazard

Classification

: Flammable liquids, Category 2

SDS Number:100000014234 1/27

Version 1.3 Revision Date 2016-07-11

Skin irritation, Category 2

Germ cell mutagenicity, Category 1B Carcinogenicity, Category 1A Reproductive toxicity, Category 2

Specific target organ systemic toxicity - single exposure,

Category 3

Specific target organ systemic toxicity - repeated exposure,

Category 1, Eyes, Blood

Specific target organ systemic toxicity - repeated exposure,

Category 2, Nervous system

Specific target organ systemic toxicity - repeated exposure,

Category 2, Inhalation, Auditory organs

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.

H340: May cause genetic defects.

H350: May cause cancer.

H361: Suspected of damaging fertility or the unborn child. H372: Causes damage to organs (Eyes, Blood, Auditory organs, Nervous system) through prolonged or repeated

exposure.

H373: May cause damage to organs (Auditory organs) through

prolonged or repeated exposure if inhaled.

Precautionary Statements : **Prevention**:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces.

No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/

equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe dust/fume/gas/mist/vapor/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

Version 1.3 Revision Date 2016-07-11

water/shower.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER/doctor if you feel unwell.

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P331 Do NOT induce vomiting.

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.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Carcinogenicity:

IARC Group 1: Carcinogenic to humans

Benzene 71-43-2

Group 2B: Possibly carcinogenic to humans

Naphthalene 91-20-3

Ethylbenzene 100-41-4

NTP Known to be human carcinogen

Benzene 71-43-2

Reasonably anticipated to be a human carcinogen

Naphthalene 91-20-3

ACGIH Confirmed human carcinogen

Benzene 71-43-2

SECTION 3: Composition/information on ingredients

Molecular formula : UVCB

Component	CAS-No.	Weight %
Naphtha (petroleum), heavy catalytic	1294446-56-2	100
cracked, C5-9 fraction		
Naphthalene	91-20-3	5 - 15
Toluene	108-88-3	5 - 10
Isopentane	78-78-4	5 - 10
2-Methylpentane	107-83-5	3 - 7
m-xylene	108-38-3	1 - 5
3-Methylpentane	96-14-0	1 - 5
2-Methylhexane	591-76-4	1 - 5
3-Methylhexane	589-34-4	1 - 5
Ethylbenzene	100-41-4	1 - 5
o-xylene	95-47-6	1 - 5

3/27

Unit 26 CC Cut #1

Version 1.3 Revision Date 2016-07-11

Benzene	71-43-2	1 - 5
p-xylene	106-42-3	1 - 5
Methylcyclohexane	108-87-2	1 - 5
n-hexane	110-54-3	1 - 5
2,3-Dimethylbutane	79-29-8	1 - 5
n-Pentane	109-66-0	1 - 5
Methylcyclopentane	96-37-7	1 - 5

SECTION 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

appear several hours later. Do not leave the victim

unattended.

: Consult a physician after significant exposure. If unconscious If inhaled

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.

: Keep respiratory tract clear. Never give anything by mouth to If swallowed

an unconscious person. If symptoms persist, call a physician.

Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point -37 °C (-35 °F)

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 an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use

SDS Number: 100000014234 4/27

Unit 26 CC Cut #1

Version 1.3 Revision Date 2016-07-11

only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

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 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.

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

US

Ingredients	Basis	Value	Control parameters	Note
Naphthalene	ACGIH	TWA	10 ppm,	hemolytic anemia, URT irr, cataract, A3, Skin,
	ACGIH	STEL	15 ppm,	hematologic eff, URT

SDS Number:100000014234 5/27

Version 1.3

Revision Date 2016-07-11

version 1.3			Revision	1 Date 2016-07-11
				irr, eye irr, eye dam, (), A4, Skin,
	OSHA Z-1	TWA	10 ppm, 50 mg/m3	(b),
	OSHA Z-1-A	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 75 mg/m3	. Zavod Savo eta Kanada
Toluene	ACGIH	TWA	20 ppm,	visual impair, female repro, pregnancy loss, BEI, A4,
	OSHA Z-2	TWA	200 ppm,	
	OSHA Z-2	CEIL	300 ppm,	
	OSHA Z-2 OSHA Z-1-A	Peak TWA	500 ppm, 100 ppm, 375 mg/m3	
	OSHA Z-1-A	STEL	150 ppm, 560 mg/m3	
Isopentane	ACGIH	TWA	1,000 ppm,	
2-Methylpentane	ACGIH	TWA	500 ppm,	CNS impair, URT irr,
z-ivietriyiperitarie	ACCIIT	TWA	300 ррпі,	eye irr, CNS impair, URT irr,
	ACGIH	STEL	1,000 ppm,	eye irr,
	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
m-xylene	OSHA Z-1	TWA STEL	100 ppm, 435 mg/m3	(b),
	OSHA Z-1-A OSHA Z-1-A	TWA	150 ppm, 655 mg/m3 100 ppm, 435 mg/m3	
				CNS impair, URT irr,
	ACGIH ACGIH	TWA STEL	100 ppm, 150 ppm,	eye irr, BEI, A4, CNS impair, URT irr,
2 Math. do anton a				eye irr, BEI, A4, CNS impair, URT irr,
3-Methylpentane	ACGIH ACGIH	TWA	500 ppm,	eye irr, CNS impair, URT irr,
		STEL	1,000 ppm,	eye irr,
	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
2-Methylhexane	OSHA Z-1-A ACGIH	STEL TWA	1,000 ppm, 3,600 mg/m3 400 ppm,	CNS impair, URT irr,
2-ivietriyirlexarie	ACGIH	STEL	500 ppm,	CNS impair, URT irr,
Mathylayalanantana	ACGIH	TWA	• • • • • • • • • • • • • • • • • • • •	CNS impair, URT irr,
Methylcyclopentane	ACGIN	IVVA	500 ppm,	eye irr,
	ACGIH	STEL	1,000 ppm,	CNS impair, URT irr, eye irr,
	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
3-Methylhexane	ACGIH	TWA	400 ppm,	CNS impair, URT irr,
E4. II	ACGIH	STEL	500 ppm,	CNS impair, URT irr,
Ethylbenzene	OSHA Z-1 OSHA Z-1-A	TWA	100 ppm, 435 mg/m3 100 ppm, 435 mg/m3	(b),
	OSHA Z-1-A OSHA Z-1-A	STEL	125 ppm, 545 mg/m3	
	ACGIH	TWA	20 ppm,	
o-xylene	OSHA Z-1	TWA	100 ppm, 435 mg/m3	(b),
	OSHA Z-1-A	STEL	150 ppm, 655 mg/m3	
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
	ACGIH	TWA	100 ppm,	CNS impair, URT irr, eye irr, BEI, A4,
	ACGIH	STEL	150 ppm,	CNS impair, URT irr,
			.,, .	eye irr, BEI, A4,
Benzene	ACGIH ACGIH	TWA STEL	0.5 ppm,	leukemia, BEI, A1, Skin,
	OSHA Z-1-A	TWA	2.5 ppm, 1 ppm,	leukemia, BEI, A1, Skin,
	OSHA Z-1-A	CEIL	5 ppm,	
	OSHA Z-2	Peak	50 ppm,	(a),
	OSHA 29 CFR 1910.1028(c)	TWA	1 ppm,	
	OSHA 29 CFR 1910.1028(c)	STEL	5 ppm,	
	OSHA CARC	PEL	1 ppm,	
	OSHA CARC	STEL	5 ppm,	
p-xylene	OSHA Z-1 OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	(b),
	OSHA Z-1-A OSHA Z-1-A	STEL TWA	150 ppm, 655 mg/m3 100 ppm, 435 mg/m3	
	ACGIH	TWA	100 ppm,	CNS impair, URT irr,
				eye irr, BEI, A4, CNS impair, URT irr,
Mathedanalahan	ACGIH	STEL	150 ppm,	eye irr, BEI, A4, CNS impair, URT irr,
Methylcyclohexane	ACGIH OSHA Z-1	TWA	400 ppm, 500 ppm, 2,000 mg/m3	liver dam, kidney dam,
	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	(υ),
n-hexane	ACGIH	TWA	50 ppm,	CNS impair, eye irr, peripheral neuropathy, BEI, Skin,
	OSHA Z-1	TWA	500 ppm, 1,800 mg/m3	(b),
	0311A Z-1			
2,3-Dimethylbutane	OSHA Z-1-A ACGIH	TWA	50 ppm, 180 mg/m3 500 ppm,	CNS impair, URT irr,

Version 1.3 Revision Date 2016-07-11

				eye irr,
	ACGIH	STEL	1,000 ppm,	CNS impair, URT irr, eye irr,
	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
n-Pentane	OSHA Z-1	TWA	1,000 ppm, 2,950 mg/m3	(b),
	OSHA Z-1-A	TWA	600 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	750 ppm, 2,250 mg/m3	
	ACGIH	TWA	1,000 ppm,	

Adopted values or notations enclosed are those for which changes are proposed in the NIC

This standard applies to the industry segments exempt from the 1 ppm 8-hour TWA and 5 ppm STEL of the benzene standard at 1910.1028.

The value in mg/m3 is approximate.

Confirmed human carcinogen

A3 Confirmed animal carcinogen with unknown relevance to humans

Not classifiable as a human carcinogen
Substances for which there is a Biological Exposure Index or Indices (see BEI® section) BEI

cataract

CNS impair Central Nervous System impairment

eye dam Eye damage eye irr Eye irritation

female repro hematologic eff hemolytic Hematologic effects Hemolytic anemia anemia

kidney dam Kidney damage leukemia Leukemia liver dam Liver damage peripheral Peripheral neuropathy neuropathy

pregnancy loss
Skin Danger of cutaneous absorption URT irr Upper Respiratory Tract irritation

visual impair Visual impairment

Hazardous components without workplace control parameters

Immediately Dangerous to Life or Health Concentrations (IDLH)

Substance name	CAS-No.	Control parameters	Update 1995-03-01	
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 ppm		
Toluene	108-88-3	Immediately Dangerous to Life or Health Concentration Value 500 ppm	1995-03-01	
m-xylene	108-38-3	Immediately Dangerous to Life or Health Concentration Value 900 ppm	1995-03-01	
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 ppm		
o-xylene	95-47-6	Immediately Dangerous to Life or Health Concentration Value 900 ppm		
Benzene	71-43-2	Immediately Dangerous to Life or Health Concentration Value 500 ppm		
p-xylene	106-42-3	Immediately Dangerous to Life or Health Concentration Value 900 ppm		
Methylcyclohexane	108-87-2	Immediately Dangerous to Life or Health Concentration Value 1200 ppm		
n-hexane	110-54-3	Immediately Dangerous to Life or Health Concentration Value 1100 ppm		
n-Pentane	109-66-0	Immediately Dangerous to Life or Health Concentration Value 1500 ppm		
Cyclohexane	110-82-7	Immediately Dangerous to Life or Health Concentration Value 1300 ppm	1995-03-01	

SDS Number:100000014234 7/27

Version 1.3 Revision Date 2016-07-11

Biological exposure indices

US

Substance name	CAS-No.	Control parameters	Sampling time	Update
Toluene	108-88-3	Toluene: 0.02 mg/l (In blood)	Prior to last shift of workweek	2010-03-01
		Toluene: 0.03 mg/l (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01
		o-Cresol: 0.3 mg/g Creatinine (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01
m-xylene	108-38-3	Methylhippuric acids: 1.5 g/g creatinine (Urine)	End of shift (As soon as possible after exposure ceases)	2013-03-01
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid: 0.15 g/g creatinine (Urine)	End of shift (As soon as possible after exposure ceases)	2014-03-01
o-xylene	95-47-6	Methylhippuric acids: 1.5 g/g creatinine (Urine)	End of shift (As soon as possible after exposure ceases)	2013-03-01
Benzene	71-43-2	S-Phenylmercapturic acid: 25 µg/g creatinine (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01
		t,t-Muconic acid: 500 μg/g creatinine (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01
p-xylene	106-42-3	Methylhippuric acids: 1.5 g/g creatinine (Urine)	End of shift (As soon as possible after exposure ceases)	2013-03-01
n-hexane	110-54-3	2,5-Hexanedione: 0.4 mg/l (Urine)	End of shift at end of workweek	2007-01-01

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

Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as:. Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, 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

SDS Number:100000014234 8/27

Unit 26 CC Cut #1

Version 1.3 Revision Date 2016-07-11

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. Protective gloves. 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.

Hygiene measures : When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Form : Liquid Physical state : Liquid

Safety data

Flash point : -37 °C (-35 °F)

Molecular formula : UVCB

Boiling point/boiling range : 38 °C (100 °F)

Relative density : 1

SECTION 10: Stability and reactivity

Chemical stability : This material is considered stable under normal ambient and

anticipated storage and handling conditions of temperature

and pressure.

Possibility of hazardous reactions

Conditions to avoid : Heat, flames and sparks.

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

SECTION 11: Toxicological information

Unit 26 CC Cut #1

SDS Number:100000014234 9/27

Unit 26 CC Cut #1

Version 1.3 Revision Date 2016-07-11

Acute oral toxicity : LD50: > 5,000 mg/kg

Species: Rat

Sex: male and female

Method: OECD Test Guideline 401 Information refers to the main ingredient.

Information given is based on data obtained from similar

substances.

Unit 26 CC Cut #1

Acute inhalation toxicity : LC50: > 5.7 mg/l

Exposure time: 4 h Species: Rat

Sex: male and female Test atmosphere: vapor

Method: OECD Test Guideline 403 Information refers to the main ingredient.

Information given is based on data obtained from similar

substances.

Unit 26 CC Cut #1
Acute dermal toxicity

: LD50: > 2,000 mg/kg

Species: Rabbit

Method: OECD Test Guideline 402 Information refers to the main ingredient.

Information given is based on data obtained from similar

substances.

Unit 26 CC Cut #1 Skin irritation

: Irritating to skin.

Information refers to the main ingredient. Information given is

based on data obtained from similar substances.

Unit 26 CC Cut #1 Eye irritation

: No eye irritation

Information refers to the main ingredient. Information given is

based on data obtained from similar substances.

Unit 26 CC Cut #1 Sensitization

: Classification: Contains no substance or substances classified

as sensitizing.

Information refers to the main ingredient. Information given is

based on data obtained from similar substances.

Repeated dose toxicity

Naphtha (petroleum), heavy catalytic cracked, C5-9

Sex: male

fraction

Application Route: oral gavage Dose: 0, 500, 2000 mg/kg

Exposure time: 28 d

: Species: Rat, male

Number of exposures: once daily, 5d/wk Lowest observable effect level: 500 mg/kg

Information given is based on data obtained from similar

substances.

SDS Number:100000014234

10/27

Version 1.3 Revision Date 2016-07-11

Species: Rabbit, male and female

Sex: male and female Application Route: Dermal Dose: 200, 1000, 2000 mg/kg

Exposure time: 28 d

Number of exposures: 3 times/wk

NOEL: > 2,000 mg/kg

Method: OECD Test Guideline 410

Information given is based on data obtained from similar

substances.

Species: Rat, male and female

Sex: male and female Application Route: Inhalation Dose: 2000, 10000, 20000 mg/m3

Exposure time: 90 d

Number of exposures: 6h/d 5d/wk

NOEL: > 20000 mg/m3

Method: OECD Test Guideline 413

Information given is based on data obtained from similar

substances.

Toluene Species: Rat

Application Route: Inhalation Dose: 0, 100, 625, 1250, 3000 ppm

Exposure time: 15 wk

Number of exposures: 6.5 h/d, 5 d/wk

NOEL: 625 ppm

Species: Mouse

Application Route: Inhalation Dose: 0, 100, 625, 1250, 3000 ppm

Exposure time: 14 wk

Number of exposures: 6.5 h/d, 5 d/wk

NOEL: 100 ppm

Isopentane Species: Rat, male and female

Sex: male and female Application Route: Inhalation Dose: 668, 2220, 6646 ppm

Exposure time: 13 wk

Number of exposures: 6 h/d, 5 d/wk

NOEL: > 2220 ppm

Lowest observable effect level: > = 6646 ppm

Method: OECD Guideline 413

Target Organs: Kidney

Information given is based on data obtained from similar

substances.

m-xylene Species: Rat

Application Route: oral gavage Dose: 0, 500, 2000 mg/kg Exposure time: 4 wk

Number of exposures: 5 d/wk

Lowest observable effect level: 500 mg/kg

Ethylbenzene Species: Rat, male

Sex: male

Application Route: Inhalation Dose: 200, 400, 600, 800 ppm

SDS Number:100000014234 11/27

Version 1.3 Revision Date 2016-07-11

Exposure time: 13 weeks

Number of exposures: 6 hours/day, 6 days/week

NOEL: 200 ppm Test substance: yes Target Organs: Ototoxicity

o-xylene Species: Rat

Application Route: Inhalation

Dose: 0, 3500 ppm Exposure time: 6 wk

Lowest observable effect level: 3500 ppm

Benzene Species: Rat, female

Sex: female

Application Route: oral gavage Dose: 0, 25, 50, 100 mg/kg Exposure time: 103 wk Number of exposures: 5 d/wk

NOEL: < 25 mg/kg

Lowest observable effect level: 25 mg/kg

Species: Rat, male

Sex: male

Application Route: oral gavage Dose: 0, 50, 100, 200 mg/kg Exposure time: 103 wk Number of exposures: 5 d/wk

NOEL: < 50 mg/kg

Lowest observable effect level: 50 mg/kg

Species: Mouse

Application Route: oral gavage Dose: 0, 25, 50,100 mg/kg Exposure time: 103 wk NOEL: < 25 mg/kg

p-xylene Species: Rat

Application Route: oral gavage Dose: 0, 100, 200, 800 mg/kg

Exposure time: 13 wk

Number of exposures: once daily

Lowest observable effect level: 800 mg/kg

Test substance: yes

Species: Rat

Application Route: Inhalation Dose: 0, 450, 900, 1800 ppm

Exposure time: 13 wk

Number of exposures: 6 h/d, 5 d/wk Lowest observable effect level: 900 ppm

Test substance: yes Target Organs: Ototoxicity

Methylcyclohexane Species: Rat, male

Sex: male

Application Route: oral gavage Dose: 62.5, 250, 1000 mg/kg

Exposure time: 28 d

Number of exposures: daily, 7d/wk

NOEL: 250 mg/kg

SDS Number:100000014234 12/27

Version 1.3 Revision Date 2016-07-11

Lowest observable effect level: 1,000 mg/kg

Method: OECD Guideline 422

Species: Rat, female

Sex: female

Application Route: oral gavage Dose: 62.5, 250, 1000 mg/kg

Exposure time: 46 d

Number of exposures: daily, 7 d/wk

NOEL: 250 mg/kg

Lowest observable effect level: 1,000 mg/kg

Method: OECD Guideline 422

n-hexane Species: Rat, male

Sex: male

Application Route: Inhalation

Dose: 3,000 ppm Exposure time: 16 wks Number of exposures: 12 h/d

Lowest observable effect level: 3,000 ppm Target Organs: Peripheral nervous system

Species: Mouse, female

Sex: female

Application Route: Inhalation

Dose: 500, 1,000, 4,000, 10,000 ppm

Exposure time: 13 wks

Number of exposures: 6h or 22h (1,000 ppm)/ 5d/wk

Lowest observable effect level: 500 ppm

Target Organs: Nose

Species: Mouse, male

Sex: male

Application Route: Inhalation

Dose: 500, 1,000, 4000, 10,000 ppm

Exposure time: 13 wks

Number of exposures: 6h or 22h (1,000 ppm)/d, 5d/wk

NOEL: 500 ppm

Lowest observable effect level: 1,000 ppm

Target Organs: Nose

Species: Rat, male

Sex: male

Application Route: oral gavage Dose: 568, 1,135, 3,973 mg/kg bw/day

Exposure time: 90 or 120 days

Number of exposures: Daily or 5d/wk (120-d study)

NOEL: 568 mg/kg bw/day

Lowest observable effect level: 1135 mg/kg bw/day

2,3-Dimethylbutane Species: Rat

Application Route: oral gavage Dose: 0, 500, 2000 mg/kg Exposure time: 4 wk

Number of exposures: once a day, 5 d/wk Lowest observable effect level: 500 mg/kg

Target Organs: Kidney

n-Pentane Species: Rat, Male and female

Sex: Male and female

SDS Number:100000014234 13/27

Version 1.3 Revision Date 2016-07-11

Application Route: inhalation (gas)
Dose: 0, 5000, 10,000, 20,000 mg/m3

Exposure time: 13 wk

Number of exposures: 6 h/d, 5 d/wk

NOEL: 20,000 mg/m3

Method: OECD Test Guideline 413

Carcinogenicity

Naphtha (petroleum), heavy

catalytic cracked, C5-9

fraction

: Species: Mouse Sex: male

Dose: 0, 0.05 ml Exposure time: 2 yrs

Number of exposures: 3 times/wk Print Date: OECD Test Guideline 451 Remarks: no increase incidence of tumors

Naphthalene Species: Mouse

Sex: male

Dose: 10, 30 ppm

Exposure time: 105 weeks

Number of exposures: 6 hours/day, 5 days/week

Test substance: yes

Print Date: No information available. Remarks: No evidence of carcinogenicity

Species: Mouse Sex: female Dose: 10, 30 ppm

Exposure time: 105 weeks

Number of exposures: 6 hours/day, 5 days/week

Test substance: yes

Print Date: No information available.

Remarks: increased incidence of alveolar/bronchiolar

adenomas

Species: Rat

Sex: male and female Dose: 10, 30, 60 ppm Exposure time: 105 weeks

Number of exposures: 6 hours/day, 5 days/week

Test substance: yes

Print Date: No information available.

Remarks: nose respiratory epithelial adenoma, increased

incidence of olfactory neuroblastomas

Toluene Species: Rat

Dose: 0, 600, 1200 ppm Exposure time: 2 yrs

Number of exposures: 6.5 h/d, 5 d/wk Remarks: No evidence of carcinogenicity

Species: Mouse Dose: 0, 600, 1200 ppm

Exposure time: 2 yrs

Number of exposures: 6.5 h/d, 5 d/wk Remarks: No evidence of carcinogenicity

o-xylene Species: Rat

SDS Number:100000014234 14/27

Version 1.3 Revision Date 2016-07-11

Dose: 0, 250, 500 mg/kg Exposure time: 103 wks Number of exposures: 5 d/wk

Remarks: No evidence of carcinogenicity

Species: Mouse

Dose: 0, 500, 1000 mg/kg Exposure time: 103 wks Number of exposures: 5 d/wk

Remarks: No evidence of carcinogenicity

Benzene Species: Rat Sex: female

Dose: 0, 25, 50, 250 mg/kg Exposure time: 103 wks

Number of exposures: daily, 5 days/week

Test substance: yes

Remarks: zymbal gland carcinomas, squamous cell

papillomas

Species: Rat Sex: male

Dose: 0, 50, 100, 200 mg/kg Exposure time: 103 wks

Number of exposures: daily, 5 days/week

Test substance: yes

Remarks: zymbal gland carcinomas, squamous cell

papillomas

Species: Mouse Sex: male and female Dose: 25, 50, 100 mg/kg Exposure time: 103 wks

Number of exposures: daily, 5 days/week

Test substance: yes

Remarks: Clear evidence of multiple organ carcinogenicity.

p-xylene Species: Rat

Sex: male and female Dose: 0, 250, 500 mg/kg Exposure time: 103 wks Number of exposures: 5 d/wk

Remarks: No evidence of carcinogenicity, Information given is

based on data obtained from similar substances.

Species: Mouse Sex: male and female Dose: 0, 500, 1000 mg/kg Exposure time: 103 wks Number of exposures: 5 d/wk

Remarks: No evidence of carcinogenicity, Information given is

15/27

based on data obtained from similar substances.

n-hexane Species: Rat

Dose: 0.043, 900, 3,000, 9,016 ppm

Exposure time: 2 yrs

Number of exposures: 6 h/d, 5 d/wk Remarks: No evidence of carcinogenicity

Version 1.3 Revision Date 2016-07-11

Species: Mouse

Dose: 0.039, 900, 3,000, 9,018 ppm

Exposure time: 2 yrs

Number of exposures: 6 h/d, 5 d/wk Remarks: No evidence of carcinogenicity

Reproductive toxicity

Toluene : Species: Rat

Application Route: Inhalation Dose: 0, 100, 500, 2000 ppm

Test period: 95 d

NOAEL Parent: 2000 ppm

Isopentane Species: Rat

Sex: male and female

Application Route: inhalation (vapor) Dose: 0, 500, 2000, 7000 ppm Number of exposures: 6 h/d 5 d/wk Method: OECD Test Guideline 416

NOAEL Parent: 7000 ppm NOAEL F1: 2000 ppm NOAEL F2: 2000 ppm

Information given is based on data obtained from similar

substances.

Species: Rat Sex: female

Application Route: oral gavage Dose: 0, 100, 300, 1000 mg/kg/d Method: OECD Test Guideline 415 NOAEL Parent: >= 1,000 mg/kg NOAEL F1: >= 1,000 mg/kg

Species: Rat Sex: male

Application Route: oral gavage Dose: 0, 100, 300, 1000 mg/kg/d Method: OECD Test Guideline 415 NOAEL Parent: >= 300 mg/kg

Methylcyclohexane Species: Rat

Sex: male

Application Route: oral gavage Dose: 62.5, 250, 1000 mg/kg Number of exposures: daily, 7 d/wk

Test period: 28

Method: OECD Guideline 422 NOAEL Parent: 1,000 mg/kg NOAEL F1: 1,000 mg/kg

SDS Number:100000014234

16/27

Version 1.3 Revision Date 2016-07-11

Species: Rat Sex: female

Application Route: oral gavage Dose: 62.5, 250, 1000 mg/kg Number of exposures: daily, 7 d/wk

Test period: 46

Method: OECD Guideline 422 NOAEL Parent: 1,000 mg/kg NOAEL F1: 1,000 mg/kg

Species: Rat

Sex: male and female

Application Route: inhalation (vapor)

Dose: 500, 2000, 7000 ppm Number of exposures: daily, 7 d/wk

Test period: 28

Method: OECD Test Guideline 416

NOAEL Parent: 500 ppm NOAEL F1: 500 ppm NOAEL F2: 2000 ppm

Information given is based on data obtained from similar

substances.

n-hexane Species: Rat

Sex: male

Application Route: Inhalation

Dose: 5,000 ppm

Number of exposures: 16 hr/d, 6 d/wk

Test period: 6 wks

permanent testicular damage characterized by loss of germ-

cell line

n-Pentane Species: Rat

Sex: male

Application Route: Inhalation Dose: 0, 5, 10, 20 mg/l Exposure time: 13 wk

Test period: 6hrs/day, 5 days/wk

NOAEL Parent: 20 mg/l no abnormalities observed

Species: Rat Sex: female

Application Route: Inhalation Dose: 0, 5, 10, 20 mg/l Exposure time: 13 wk

Test period: 6hrs/day, 5days/wk

NOAEL Parent: 20 mg/l no abnormalities observed

Developmental Toxicity

Naphthalene : Species: Rabbit

Application Route: oral gavage Dose: 40, 200, 400 mg/kg Test period: 29 d, GD 6-18

NOAEL Teratogenicity: 400 mg/kg

Toluene Species: Rat

SDS Number:100000014234 17/27

Version 1.3 Revision Date 2016-07-11

Application Route: Inhalation Dose: 0, 100, 500, 2000 ppm

Test period: 95 d

NOAEL Teratogenicity: 400-750 ppm

Isopentane Species: Rat

Application Route: oral gavage Dose: 0, 100, 500, 1000 mg/kg/d

Exposure time: GD 6-15 Number of exposures: daily Method: OECD Guideline 414 NOAEL Teratogenicity: 1,000 mg/kg NOAEL Maternal: 1,000 mg/kg

Information given is based on data obtained from similar

substances.

Species: Rat

Application Route: Inhalation
Dose: 0, 500, 2000, 7000 ppm
Exposure time: GD 6-15
Number of exposures: 5 d/wk
Method: OECD Guideline 414
NOAEL Teratogenicity: 7000 ppm
NOAEL Maternal: 500 - 2000 ppm

Information given is based on data obtained from similar

substances.

Species: Rabbit

Application Route: Inhalation Dose: 0, 500, 2000, 7000 ppm Exposure time: GD 6-18 Method: OECD Guideline 414 NOAEL Teratogenicity: 7000 ppm NOAEL Maternal: 7000 ppm

Information given is based on data obtained from similar

substances.

m-xylene Species: Rat

Application Route: Inhalation

Dose: 0, 1, 100, 500, 1000, 2000 ppm Number of exposures: 6 h/d, 7 d/wk

Test period: GD 6-20 Test substance: yes

Method: OECD Guideline 414 NOAEL Teratogenicity: 2000 ppm NOAEL Maternal: 500 ppm

o-xylene Species: Rat

Application Route: Inhalation Dose: 0, 100, 500, 1000, 2000 ppm Number of exposures: 6 h/d, 7 d/wk

Test period: GD 6-20

NOAEL Teratogenicity: 100 ppm NOAEL Maternal: 500 ppm

Methylcyclohexane Species: Rat

Application Route: Inhalation Dose: 500, 2000, 7000 ppm

Number of exposures: 6 hr/d, 7 d/wk

Test period: GD 7 - 16

SDS Number:100000014234 18/27

Version 1.3 Revision Date 2016-07-11

Method: OECD Guideline 414 NOAEL Teratogenicity: 7000 ppm NOAEL Maternal: 500 ppm

Information given is based on data obtained from similar

substances.

Species: Rabbit

Application Route: Inhalation Dose: 500, 2000, 7000 ppm

Number of exposures: 6 hr/d, 7 d/wk

Test period: GD 6 - 18 Method: OECD Guideline 414 NOAEL Teratogenicity: 7000 ppm NOAEL Maternal: 500 ppm

Information given is based on data obtained from similar

substances.

n-hexane Species: Rat

Application Route: Inhalation Dose: 200, 1,000, 5,000 ppm Number of exposures: 20 hr/d, daily

Test period: GD 6-20

NOAEL Teratogenicity: 200 ppm NOAEL Maternal: 200 ppm

Species: Mouse

Application Route: Inhalation Dose: 200, 1,000, 5,000 ppm Number of exposures: 20 hr/d, daily

Test period: GD 6-17

NOAEL Maternal: 1,000 ppm

n-Pentane Species: Rat

Application Route: Inhalation Dose: 0, 1000, 3000, 10000 ppm Number of exposures: 6 h/d

Test period: GD 6-15

NOAEL Teratogenicity: 10,000 ppm

Unit 26 CC Cut #1 Aspiration toxicity

: May be fatal if swallowed and enters airways.

CMR effects

Naphtha (petroleum), heavy catalytic cracked, C5-9

fraction

Carcinogenicity: Possible human carcinogen

Mutagenicity: In vivo tests showed mutagenic effects Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on

animal experiments.

Naphthalene Carcinogenicity: Limited evidence of carcinogenicity in animal

studies

Toluene Carcinogenicity: Not classifiable as a human carcinogen.

Mutagenicity: Animal testing did not show any mutagenic

effects.

Teratogenicity: Some evidence of adverse effects on

development, based on animal experiments.

Reproductive toxicity: Some evidence of adverse effects on

SDS Number:100000014234 19/27

Version 1.3 Revision Date 2016-07-11

sexual function and fertility, and/or on development, based on

animal experiments.

Isopentane Carcinogenicity: Not available

Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., In vivo tests 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.

m-xylene Carcinogenicity: Animal testing did not show any carcinogenic

effects.

Mutagenicity: Did not show mutagenic effects in animal

experiments.

Teratogenicity: Did not show teratogenic effects in animal

experiments.

Reproductive toxicity: No toxicity to reproduction

Ethylbenzene Mutagenicity: In vivo tests did not show mutagenic effects

Teratogenicity: Did not show teratogenic effects in animal

experiments.

Reproductive toxicity: No toxicity to reproduction

o-xylene Carcinogenicity: Animal testing did not show any carcinogenic

effects.

Mutagenicity: Did not show mutagenic effects in animal

experiments.

Teratogenicity: Did not show teratogenic effects in animal

experiments.

Reproductive toxicity: No toxicity to reproduction

Benzene Carcinogenicity: Human carcinogen.

Mutagenicity: In vivo tests showed mutagenic effects Teratogenicity: Did not show teratogenic effects in animal

experiments.

Reproductive toxicity: Animal testing did not show any effects

on fertility.

p-xylene Carcinogenicity: Animal testing did not show any carcinogenic

effects.

Mutagenicity: Did not show mutagenic effects in animal

experiments.

Teratogenicity: Did not show teratogenic effects in animal

experiments.

Reproductive toxicity: No toxicity to reproduction

Methylcyclohexane 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-hexane Carcinogenicity: Not classifiable as a human carcinogen.

Mutagenicity: Did not show mutagenic effects in animal

experiments.

Teratogenicity: Suspected of damaging the unborn child.

SDS Number:100000014234 20/27

Version 1.3 Revision Date 2016-07-11

Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on

animal experiments.

Unit 26 CC Cut #1
Further information

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

may degrease the skin.

SECTION 12: Ecological information

Ecotoxicity effects

Toxicity to fish : LL50: 10 mg/l

Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203

Information refers to the main ingredient.

Information given is based on data obtained from similar

substances.

Toxicity to daphnia and other aquatic invertebrates

: EL50: 4.5 mg/l Exposure time: 48 h

Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202 Information refers to the main ingredient.

Information given is based on data obtained from similar

substances.

Toxicity to algae : ErL50: 3.1 mg/l

Exposure time: 96 h

Species: Selenastrum capricornutum (green algae) static test Method: OECD Test Guideline 201 Information refers to the main ingredient.

Information given is based on data obtained from similar

substances.

Toxicity to bacteria : 15.41 mg/l

Exposure time: 40 h

Species: Tetrahymena pyriformis

Growth inhibition

Method: QSAR modeled data

Information refers to the main ingredient.

Toxicity to daphnia and other aquatic invertebrates

(Chronic toxicity)

: NOELR: 2.6 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

semi-static test

Method: OECD Test Guideline 211 Information refers to the main ingredient.

Information given is based on data obtained from similar

21/27

substances.

Unit 26 CC Cut #1

Version 1.3 Revision Date 2016-07-11

Elimination information (persistence and degradability)

Bioaccumulation : Bioaccumulation is unlikely.

Information refers to the main ingredient.

Biodegradability : aerobic

Result: Inherently biodegradable.

96 %

Testing period: 56 d Method: ISO/DIS 14593

Information refers to the main ingredient.

Information given is based on data obtained from similar

substances.

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Results of PBT assessment : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological

information

: 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)

SDS Number:100000014234 22/27

Version 1.3 Revision Date 2016-07-11

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, MARINE POLLUTANT, (NAPHTHALENE)

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, (-37 °C), MARINE POLLUTANT

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

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

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

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

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

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

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

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards : Fire Hazard

Acute Health Hazard Chronic Health Hazard

CERCLA Reportable

Quantity

: 565 lbs

Benzene

SARA 302 Reportable

Quantity

: This material does not contain any components with a SARA

302 RQ.

SARA 302 Threshold

Planning Quantity

: No chemicals in this material are subject to the reporting

requirements of SARA Title III, Section 302.

SARA 304 Reportable

Quantity

: This material does not contain any components with a section

23/27

304 EHS RQ.

Version 1.3 Revision Date 2016-07-11

SARA 313 Ingredients : The following components are subject to reporting levels

established by SARA Title III, Section 313:

: Naphthalene - 91-20-3 Toluene - 108-88-3 m-xylene - 108-38-3 Ethylbenzene - 100-41-4 o-xylene - 95-47-6 Benzene - 71-43-2 p-xylene - 106-42-3

n-hexane - 110-54-3

Clean Air Act

Ozone-Depletion : This product neither contains, nor was manufactured with a Class I or

Potential 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 12 (40 CFR 61):

: Toluene - 108-88-3 Ethylbenzene - 100-41-4 Benzene - 71-43-2 n-hexane - 110-54-3

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

: Isopentane - 78-78-4 trans-2-Pentene - 646-04-8 2-methyl-1-butene - 563-46-2

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

: Toluene - 108-88-3 Isopentane - 78-78-4 Ethylbenzene - 100-41-4 o-xylene - 95-47-6 Benzene - 71-43-2

Methylcyclohexane - 108-87-2 Cyclohexane - 110-82-7

US State Regulations

Pennsylvania Right To Know

Naphthalene - 91-20-3
 Toluene - 108-88-3

 Isopentane - 78-78-4
 2-Methylpentane - 107-83-5
 m-xylene - 108-38-3

 3-Methylpentane - 96-14-0
 2-Methylhexane - 591-76-4
 3-Methylhexane - 589-34-4

SDS Number:100000014234 24/27

Version 1.3 Revision Date 2016-07-11

Ethylbenzene - 100-41-4 o-xylene - 95-47-6 Benzene - 71-43-2 p-xylene - 106-42-3

Methylcyclohexane - 108-87-2

n-hexane - 110-54-3

2,3-Dimethylbutane - 79-29-8

n-Pentane - 109-66-0

Methylcyclopentane - 96-37-7

New Jersey Right To Know

: Naphthalene - 91-20-3 Toluene - 108-88-3 Isopentane - 78-78-4 2-Methylpentane - 107-83-5 m-xylene - 108-38-3 3-Methylhexane - 589-34-4 Ethylbenzene - 100-41-4 o-xylene - 95-47-6 Benzene - 71-43-2 p-xylene - 106-42-3

Methylcyclohexane - 108-87-2

n-hexane - 110-54-3

2,3-Dimethylbutane - 79-29-8

n-Pentane - 109-66-0

Methylcyclopentane - 96-37-7

California Prop. 65

Ingredients

: WARNING! This product contains a chemical known in the

State of California to cause cancer.

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive

harm.

Notification status

Europe REACH : Not in compliance with the inventory Switzerland CH INV : Not in compliance with the inventory

United States of America TSCA : On the inventory, or in compliance with the inventory Canada NDSL : This product contains one or several components listed

in the Canadian NDSL.

Australia AICS : Not 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

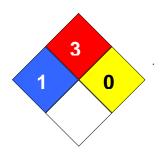
Korea KECI : Not in compliance with the inventory Philippines PICCS : Not in compliance with the inventory China IECSC : Not in compliance with the inventory

Version 1.3 Revision Date 2016-07-11

SECTION 16: Other information

NFPA Classification : Health Hazard: 1

Fire Hazard: 3 Reactivity Hazard: 0



Further information

Legacy SDS Number : 625870

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 use	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	TWA	Time Weighted Average

SDS Number:100000014234 26/27

Unit 26 CC Cut #1

Version 1.3 Revision Date 2016-07-11

	Substances in China		
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%		

SDS Number:100000014234 27/27