

**Benzene / Toluene Mixture**

Version 1.4

Revision Date 2020-11-02

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

Product Name : Benzene / Toluene Mixture
Material : 1103776

Use : Feedstock

Company : Saudi Chevron Phillips Company
10001 Six Pines Drive
The Woodlands, TX 77380

Local : Saudi Chevron Phillips
PO Box 11221
Jubail Industrial City
Eastern Province, 31961

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

Emergency telephone:**Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

Transport:

CHEMTREC 800.424.9300 or 703.527.3887(int'l)

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

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

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

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

Argentina: +(54)-1159839431

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****Globally Harmonized System of Classification and Labeling of Chemicals (GHS)****GHS-Classification**

: Flammable liquids, Category 2

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Skin corrosion/irritation, Category 2
 Serious eye damage/eye irritation, Category 2A
 Germ cell mutagenicity, Category 1B
 Carcinogenicity, Category 1A
 Reproductive toxicity, Category 2
 Specific target organ toxicity - single exposure, Category 3,
 Central nervous system
 Specific target organ toxicity - repeated exposure, Category 1,
 Blood
 Specific target organ toxicity - repeated exposure, Category 2,
 Inhalation, Auditory organs, color vision
 Aspiration hazard, Category 1
 Short-term (acute) aquatic hazard, Category 2
 Long-term (chronic) aquatic hazard, Category 2

GHS-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.
 H319: Causes serious eye 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 (Blood) through prolonged or repeated exposure.
 H373: May cause damage to organs (Auditory organs, color vision) through prolonged or repeated exposure if inhaled.
 H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements

: **Prevention:**
 P203 Obtain, read and follow all safety instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.
 P240 Ground and bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242 Use non-sparking tools.
 P243 Take action to prevent static discharges.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ 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.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
Response:
 P301 + P316 IF SWALLOWED: Get emergency medical help immediately.

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

P304 + P340 + P319 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P318 IF exposed or concerned, get medical advice.

P331 Do NOT induce vomiting.

P332 + P317 If skin irritation occurs: Get medical help.

P337 + P317 If eye irritation persists: Get medical help.

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 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.

SECTION 3: Composition/information on ingredients

Synonyms : S-Chem Benzene Toluene Mix

Molecular formula : UVCB

Chemical name	CAS-No. / EINECS-No.	Concentration [wt%]
Naphtha (petroleum), light catalytic reformed	64741-63-5	90 - 100
Toluene	108-88-3	60 - 100
Benzene	71-43-2	0 - 40

SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while

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If swallowed : rinsing. If eye irritation persists, consult a specialist.
 : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point : -11°C (12°F)
 Method: Tag closed cup

Autoignition temperature : 580°C (1,076°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 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.

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,

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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. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

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

Storage

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

Use : Feedstock

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

Components	Basis	Value	Control parameters	Note
Toluene	DE TRGS 900	AGW	50 ppm, 190 mg/m ³	H, Y,
Benzene	DE TRGS 910	Acceptable concentration	0.06 ppm, 0.2 mg/m ³	H,
	DE TRGS 910	Tolerable concentration	0.6 ppm, 1.9 mg/m ³	H,

H Skin absorption

Y When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child

ID

Komponen	Dasar	Nilai	Parameter pengendalian	Catatan
Toluena	ID OEL	NAB	50 ppm, 188 mg/m ³	A4, Kulit,
Benzena	ID OEL	NAB	0.5 ppm,	A1, Kulit,
	ID OEL	PSD	2.5 ppm,	A1, Kulit,

A1 Terbukti karsinogen untuk manusia (Confirmed Human Carcinogen)

A4 Tidak diklasifikasikan karsinogen terhadap manusia. Tidak cukup data untuk mengklasifikasikan bahan-bahan ini bersifat karsinogen terhadap manusia ataupun binatang

Kulit Kulit

IN

Components	Basis	Value	Control parameters	Note
Naphtha (petroleum), light catalytic reformed	IN OEL	TWA	300 ppm, 900 mg/m ³	

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	IN OEL	STEL	500 ppm, 1,500 mg/m3	
Toluene	IN OEL	TWA	100 ppm, 375 mg/m3	
	IN OEL	STEL	150 ppm, 560 mg/m3	
Benzene	IN OEL	TWA	0.5 ppm, 1.5 mg/m3	HC,
	IN OEL	STEL	2.5 ppm, 7.5 mg/m3	HC,

HC Confirmed human carcinogens

MY

Komponen	Dasar	Nilai	Parameter Kawalan	Nota
Toluena	MY PEL	TWA	50 ppm, 188 mg/m3	
Benzena	MY PEL	TWA	0.5 ppm, 1.6 mg/m3	

PH

Components	Basis	Value	Control parameters	Note
Naphtha (petroleum), light catalytic reformed	PH OEL	TWA	500 ppm, 2,000 mg/m3	
Toluene	PH OEL	TWA	100 ppm, 375 mg/m3	
Benzene	PH OEL	C	25 ppm, 80 mg/m3	

US

Components	Basis	Value	Control parameters	Note
Naphtha (petroleum), light catalytic reformed	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	
Benzene	ACGIH	TWA	0.5 ppm,	A1, Skin,
	ACGIH	STEL	2.5 ppm,	A1, Skin,
	OSHA Z-1-A	TWA	1 ppm,	
	OSHA Z-1-A	CEIL	5 ppm,	
	OSHA Z-2	Peak	50 ppm,	
	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,	
Toluene	ACGIH	TWA	20 ppm,	A4,
	OSHA Z-2	TWA	200 ppm,	
	OSHA Z-2	CEIL	300 ppm,	
	OSHA Z-2	Peak	500 ppm,	
	OSHA Z-1-A	TWA	100 ppm, 375 mg/m3	
	OSHA Z-1-A	STEL	150 ppm, 560 mg/m3	

A1 Confirmed human carcinogen

A4 Not classifiable as a human carcinogen

Skin Danger of cutaneous absorption

Biological exposure indices**DE**

Substance name	CAS-No.	Control parameters	Sampling time	Update
Toluene	108-88-3	toluene: 600 µg/l (Blood)	End of shift	2019-03-29
		o-cresol: 1.5 mg/l After hydrolysis (Urine)	In case of long-term exposure: after more than one shift Immediately after exposure or after working hours	2019-03-29
		toluene: 75 µg/l (Urine)	Immediately after exposure or after working hours	2019-03-29

ID

Nama bahan	No-CAS	Parameter pengendalian	Waktu pengambilan sampel	Terkini

IN

Substance name	CAS-No.	Control parameters	Sampling time	Update

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MY

Nama bahan	No.-CAS	Parameter Kawalan	Waktu persampelan	Kemaskini
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PH

Substance name	CAS-No.	Control parameters	Sampling time	Update
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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 Background (Urine) With hydrolyses ()	End of shift (As soon as possible after exposure ceases)	2010-03-01
Benzene	71-43-2	S-Phenylmercapturic acid: 25 µg/g creatinine Background (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01
		t,t-Muconic acid: 500 µg/g creatinine Background (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01

Engineering measures

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

Personal protective equipment

- Respiratory protection : 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, 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.

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- 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**

- Physical state : liquid
 Color : Clear, colorless
 Odor : sweet, distinct
 Odor Threshold : No data available

Safety data

- Flash point : -11°C (12°F)
 Method: Tag closed cup
- Lower explosion limit : No data available
- Upper explosion limit : No data available
- Oxidizing properties : No
- Autoignition temperature : 580°C (1,076°F)
- Thermal decomposition : No data available
- Molecular formula : UVCB
- Molecular weight : Not applicable
- pH : Not applicable
- Pour point : No data available
- Boiling point/boiling range : 80°C (176°F)
- Vapor pressure : 75.00 MMHG
 at 20°C (68°F)
- Relative density : 0.87
 at 15.6 °C (60.1 °F)
- Density : 0.87 G/ML
- Water solubility : Insoluble in water; miscible with most organic solvents.
- Partition coefficient: n-octanol/water : No data available

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Solubility in other solvents	: No data available
Viscosity, kinematic	: < 1.138 cSt at 37.8°C (100.0°F)
Relative vapor density	: 2.77 (Air = 1.0)
Evaporation rate	: 2.8
Percent volatile	: > 99 % 40 %

SECTION 10: Stability and reactivity

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions	
Hazardous reactions	: Hazardous reactions: Hazardous polymerization does not occur. Further information: No decomposition if stored and applied as directed. 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.
Thermal decomposition	: No data available
Hazardous decomposition products	: Carbon oxides
Other data	: No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

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

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Benzene / Toluene Mixture**Acute inhalation toxicity** : No data available**Benzene / Toluene Mixture****Acute dermal toxicity** : LD50 Dermal: > 5,000 mg/kg
Species: Rabbit
Method: Acute toxicity estimate**Benzene / Toluene Mixture****Skin irritation** : May irritate skin.**Benzene / Toluene Mixture****Eye irritation** : May irritate eyes.**Benzene / Toluene Mixture****Sensitization** : No data available.**Repeated dose toxicity**Naphtha (petroleum), light catalytic reformed : Species: Rat
Application Route: Inhalation
Dose: 0, 2.00, 5.85, 20.3 mg/l
Exposure time: 21 day
Number of exposures: 6 h/d, 5 d/wk
NOEL: 20.3 mg/lSpecies: Rabbit
Application Route: Dermal
Dose: 0, 200, 1000, 2000 mg/l
Exposure time: 28 day
Number of exposures: 3 times/wk
Lowest observable effect level: 1000 mg/l

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 ppmSpecies: 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

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

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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

Genotoxicity in vitro

Naphtha (petroleum), light
 catalytic reformed

: Test Type: Ames test
 Result: negative

Test Type: Cytogenetic assay
 Result: negative

Toluene

Test Type: Ames test
 Result: negative

Test Type: Sister Chromatid Exchange Assay
 Result: negative

Test Type: Mouse lymphoma assay
 Result: negative

Test Type: Cytogenetic assay
 Result: negative

Benzene

Test Type: Ames test
 Result: negative

Test Type: Cytogenetic assay
 Result: positive

Test Type: Mouse lymphoma assay
 Result: positive

Test Type: Sister Chromatid Exchange Assay
 Result: negative

Genotoxicity in vivo

Naphtha (petroleum), light
 catalytic reformed

: Test Type: Cytogenetic assay
 Result: negative

Toluene

Test Type: Cytogenetic assay
 Result: negative

Test Type: Mouse micronucleus assay
 Result: negative

Benzene

Test Type: Mouse micronucleus assay

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Result: positive

Carcinogenicity

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

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.

Reproductive toxicity

Toluene

: Species: Rat
 Application Route: Inhalation
 Dose: 0, 100, 500, 2000 ppm
 Test period: 95 d
 NOAEL Parent: 2000 ppm

Developmental Toxicity

Toluene

: Species: Rat
 Application Route: Inhalation
 Dose: 0, 100, 500, 2000 ppm
 Test period: 95 d
 NOAEL Teratogenicity: 400-750 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 hazard.

CMR effects

Naphtha (petroleum), light catalytic reformed

: 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.

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 sexual function and fertility, and/or on development, based on animal experiments.

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.

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Further information**

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

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

Naphtha (petroleum), light catalytic reformed

: LL50: 8.2 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)
semi-static test

Toluene

LC50: 18 - 36 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)

Benzene

LC50: 5.3 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)
flow-through test Test substance: yes
Method: OECD Test Guideline 203

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Toxicity to daphnia and other aquatic invertebrates

Toluene : EC50: 3.78 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Benzene EC50: 10 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
static test Test substance: yes
Method: OECD Test Guideline 202

Toxicity to algae

Toluene : EC50: 134 mg/l
Exposure time: 72 h
Species: Chlamydomonas angulosa (Green algae)

Benzene ErC50: 100 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
Test substance: yes
Method: OECD Test Guideline 201

Biodegradability : Expected to be biodegradable

Elimination information (persistence and degradability)

Bioaccumulation

Naphtha (petroleum), light catalytic reformed : The product may be accumulated in organisms.
Benzene : Bioconcentration factor (BCF): 13

Mobility : No data available

Results of PBT assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

Ecotoxicology Assessment

Short-term (acute) aquatic hazard : Toxic to aquatic life.

Long-term (chronic) aquatic hazard : Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

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

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

Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

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

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

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, RQ (BENZENE, TOLUENE)

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, (-11°C), MARINE POLLUTANT, (NAPHTHA (PETROLEUM), LIGHT CATALYTIC REFORMED)

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, (D/E), ENVIRONMENTALLY HAZARDOUS, (NAPHTHA (PETROLEUM), LIGHT CATALYTIC REFORMED)

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

UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (NAPHTHA (PETROLEUM), LIGHT CATALYTIC REFORMED)

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

UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (NAPHTHA (PETROLEUM), LIGHT CATALYTIC REFORMED)

Benzene / Toluene Mixture

Version 1.4

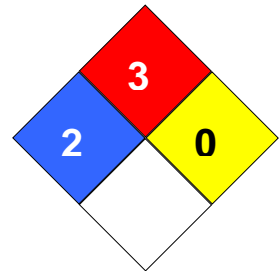
Revision Date 2020-11-02

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**SECTION 15: Regulatory information****Notification status**

Europe REACH	:	Not in compliance with the inventory
United States of America (USA) TSCA	:	On or in compliance with the active portion of the TSCA inventory
Canada DSL	:	All components of this product are on the Canadian DSL
Australia AICS	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	Not in compliance with the inventory
Japan ENCS	:	On the inventory, or in compliance with the inventory
Korea KECI	:	A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance or the exported amount does not exceed the minimum threshold quantity of the non-registered substance(s).
Philippines PICCS	:	Not in compliance with the inventory
China IECSC	:	On the inventory, or in compliance with the inventory
Taiwan TCSI	:	On the inventory, or in compliance with the inventory

SECTION 16: Other information

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

**Further information**

Legacy SDS Number : JCP00003

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

Benzene / Toluene Mixture

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specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

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