Printing date 11/16/2017 Reviewed on 11/16/2017

1 Identification

· Product identifier

· Trade name: Steam Cracked Naphtha

· Article number: EXX193B

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson sherman@aquasolutions.org

· Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666



2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Tox. 3 H311 Toxic in contact with skin.



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1A H350 May cause cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 1 H372-H373 Causes damage to organs through prolonged or repeated exposure. May cause

damage to the hearing organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways. Asp. Tox. 1 H304



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation. STOT SE 3 H336 May cause drowsiness or dizziness.

· Label elements

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). (Contd. on page 2)



(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

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Trade name: Steam Cracked Naphtha

· Hazard pictograms









GHS02

GHS06

GHS07

GH302 G

GH200 GH20

· Signal word Danger

· Hazard-determining components of labeling:

Benzene

Toluene

Xylene (*Xylol*)

Ethylbenzene, Anhydrous, 99.8%

Hexane

Cyclohexane

1,2,4-Trimethylbenzene

cumene

· Hazard statements

Highly flammable liquid and vapor.

Toxic in contact with skin.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure. May cause damage to the hearing organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

 $Use\ explosion-proof\ electrical/ventilating/lighting/equipment.$

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Get medical advice/attention if you feel unwell.

Specific treatment (see on this label).

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

(Contd. on page 3)

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Trade name: Steam Cracked Naphtha

(Contd. of page 2)

Take off immediately all contaminated clothing and wash it before reuse.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



*2 *Health* = *2 Fire = 3

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 108-88-3	Toluene	30.0%
CAS: 71-43-2	Benzene	20.0%
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	10.0%
CAS: 95-63-6	1,2,4-Trimethylbenzene	5.0%
CAS: 110-82-7		4.9%
CAS: 1330-20-7	Xylene (Xylol)	4.9%
CAS: 110-54-3	Hexane	4.8%
CAS: 98-82-8	cumene	0.9%

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest provide artificial respiration.

- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

(Contd. on page 4)

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Trade name: Steam Cracked Naphtha

(Contd. of page 3)

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

CAS: 108-88-3	Toluene	67 ppm
CAS: 71-43-2	Benzene	52 ppm
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	33 ppm
CAS: 95-63-6	1,2,4-Trimethylbenzene	140 ppm
CAS: 110-82-7	Cyclohexane	300 ppm
CAS: 1330-20-7	Xylene (Xylol)	130 ppm
CAS: 110-54-3	Hexane	260 ppm
CAS: 98-82-8	cumene	50 ppm
· PAC-2:		
CAS: 108-88-3	Toluene	560 ppm
CAS: 71-43-2	Benzene	800 ppm
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	1100* ppm
CAS: 95-63-6	1,2,4-Trimethylbenzene	360 ppm
CAS: 110-82-7	Cyclohexane	1700* ppm
CAS: 1330-20-7	Xylene (Xylol)	920* ppm
CAS: 110-54-3	Hexane	2900* ppm
CAS: 98-82-8	cumene	300 ppm

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Trade name: Steam Cracked Naphtha

		(Contd. of page 4)
· PAC-3:		
CAS: 108-88-3	Toluene	3700* ppm
CAS: 71-43-2	Benzene	4000* ppm
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	1800* ppm
CAS: 95-63-6	1,2,4-Trimethylbenzene	480 ppm
CAS: 110-82-7	Cyclohexane	10000** ppm
CAS: 1330-20-7	Xylene (Xylol)	2500* ppm
CAS: 110-54-3	Hexane	8600** ppm
CAS: 98-82-8	cumene	730 ppm

7 Handling and storage

- · Handling:
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

· Cont	· Control parameters			
· Com	· Components with limit values that require monitoring at the workplace:			
CAS.	: 108-88-3 Toluene			
PEL	Long-term value: 200 ppm Ceiling limit value: 300; 500* ppm *10-min peak per 8-hr shift			
REL	Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm			
TLV	Long-term value: 75 mg/m³, 20 ppm BEI			
CAS.	CAS: 71-43-2 Benzene			
PEL	Short-term value: 15* mg/m³, 5* ppm Long-term value: 3* mg/m³, 1* ppm *table Z-2 for exclusions in 29CFR1910.1028(d)			

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Trade name: Steam Cracked Naphtha

	(Contd. of pag
REL S	Short-term value: 1 ppm
	Long-term value: 0.1 ppm
S	Gee Pocket Guide App. A
	Short-term value: 8 mg/m³, 2.5 ppm
	Long-term value: 1.6 mg/m³, 0.5 ppm
S	Skin; BEI
	100-41-4 Ethylbenzene, Anhydrous, 99.8%
PEL L	Long-term value: 435 mg/m³, 100 ppm
	Short-term value: 545 mg/m³, 125 ppm
L	Long-term value: 435 mg/m³, 100 ppm
	Long-term value: 87 mg/m³, 20 ppm BEI
	95-63-6 1,2,4-Trimethylbenzene
$REL \mid L$	Long-term value: 125 mg/m³, 25 ppm
$TLV \mid L$	Long-term value: 123 mg/m³, 25 ppm
CAS: 1	110-82-7 Cyclohexane
PEL L	ong-term value: 1050 mg/m³, 300 ppm
REL L	Long-term value: 1050 mg/m³, 300 ppm
	Long-term value: 344 mg/m³, 100 ppm
CAS: 1	1330-20-7 Xylene (Xylol)
PEL L	ong-term value: 435 mg/m³, 100 ppm
REL S	Short-term value: 655 mg/m³, 150 ppm
	Long-term value: 435 mg/m³, 100 ppm
	Short-term value: 651 mg/m³, 150 ppm
	Long-term value: 434 mg/m³, 100 ppm
	BEI
CAS: 1	110-54-3 Hexane
PEL L	ong-term value: 1800 mg/m³, 500 ppm
REL L	Long-term value: 180 mg/m³, 50 ppm
	Long-term value: 176 mg/m³, 50 ppm
	kin; BEI
CAS: 9	98-82-8 cumene
	ong-term value: 245 mg/m³, 50 ppm
S	Kkin
REL L	Long-term value: 245 mg/m³, 50 ppm
	ikin
$TLV \mid L$	Long-term value: (246) NIC-0.5 mg/m³, (50) NIC-0.1 ppm
	VIC-A2
	(Contd. on pag

US

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Trade name: Steam Cracked Naphtha

(Contd. of page 6)

· Ingredients with biological limit values:

CAS: 108-88-3 Toluene

BEI 0.02 mg/L

LD50 Intraperitoneal: blood

Time: prior to last shift of workweek

LD50: Toluene

 $0.03 \, mg/L$

LD50 Intraperitoneal: urine

Time: end of shift

LD50: Toluene

0.3 mg/g creatinine

LD50 Intraperitoneal: urine

Time: end of shift

LD50: o-Cresol with hydrolysis (background)

CAS: 71-43-2 Benzene

BEI 25 μg/g creatinine

LD50 Intraperitoneal: urine

Time: end of shift Parameter

LD50: S-Phenylmercapturic acid (background

500 μg/g creatinine

LD50 Intraperitoneal: urine

Time: end of shift

LD50: t,t-Muconic acid (background)

CAS: 100-41-4 Ethylbenzene, Anhydrous, 99.8%

BEI 0.7 g/g creatinine

LD50 Intraperitoneal: urine

Time: end of shift at end of workweek

LD50: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative)

-

LD50 Intraperitoneal: end-exhaled air

Time: not critical

LD50: Ethyl benzene (semi-quantitative)

CAS: 1330-20-7 Xylene (Xylol)

BEI 1.5 g/g creatinine

LD50 Intraperitoneal: urine

Time: end of shift

LD50: Methylhippuric acids

CAS: 110-54-3 Hexane

BEI 0.4 mg/L

LD50 Intraperitoneal: urine

Time: end of shift at end of workweek

LD50: 2.5-Hexanedione without hydrolysis

· Additional information: The lists that were valid during the creation were used as basis.

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

(Contd. on page 8)

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Trade name: Steam Cracked Naphtha

(Contd. of page 7)

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties · General Information		
· Appearance:		
Form:	Liquid	
Color:	Yellow	
· Odor:	Aromatic	
· Odor threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. 80°C (176°F)	
· Flash point:	5 °C (41 °F)	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	430 °C (806 °F)	
· Decomposition temperature:	Not determined.	

(Contd. on page 9)

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Trade name: Steam Cracked Naphtha

	(Contd. of page
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo mixtures are possible.
Explosion limits:	
Lower:	1 Vol %
Upper:	8 Vol %
Vapor pressure at 20 °C (68 °F):	100 hPa (75 mm Hg)
Density:	Not determined.
Relative density	Not determined.
Vapor density Not determined.	
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wate	e r): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	80.5 %
VOC content:	80.50 %
	805.0 g/l / 6.72 lb/gl
Solids content:	0.0 %
Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Oral	LD50	8,908 mg/kg (rat)
Dermal	LD50	239 mg/kg
Inhalative	LC50/4 h	55.3 mg/l

(Contd. on page 10)

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Trade name: Steam Cracked Naphtha

		(Contd. of pa
CAS: 108-88-3 Toluene		
Oral	LD50	5,000 mg/kg (rat)
Dermal	<i>LD50</i>	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	5,320 mg/l (mouse)
CAS: 71-4	3-2 Benzer	ne
Oral	LD50	4,894 mg/kg (rat)
Dermal	<i>LD50</i>	48 mg/kg (mouse)
Inhalative	LC50/4 h	9,980 mg/l (mouse)
CAS: 100-	41-4 Ethyl	benzene, Anhydrous, 99.8%
Dermal	LD50	15,433 mg/kg (rabbit)
Inhalative	LC50/4 h	11 mg/l (ATE)
CAS: 95-6	3-6 1,2,4-7	Trimethylbenzene
Oral	LD50	6,000 mg/kg (rat)
Inhalative	LC50/4 h	11 mg/l (ATE)
CAS: 110-82-7 Cyclohexane		
Oral	LD50	12,705 mg/kg (rat)
CAS: 110-54-3 Hexane		
Oral	LD50	25,000 mg/kg (rat)
Inhalative	LC50/4 h	48,000 mg/l (rat)
Primary ir	ritant effe	of•

- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Toxic

Irritant

The product can cause inheritable damage.

· Carcinogenic categories

U	curemogenic curegories		
· IARC (International Agency for Research on Cancer)			
CAS: 108-88-3	Toluene	3	
CAS: 71-43-2	Benzene	1	
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	2B	
CAS: 1330-20-	7 Xylene (Xylol)	3	
CAS: 98-82-8	cumene	2 <i>B</i>	
· NTP (National Toxicology Program)			
CAS: 71-43-2	Benzene	K	
CAS: 98-82-8	cumene	R	
· OSHA-Ca (Occupational Safety & Health Administration)			
CAS: 71-43-2	Benzene		

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.

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Trade name: Steam Cracked Naphtha

(Contd. of page 10)

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

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· UN-Number · DOT, IMDG, IATA	UN1993
· DO1, IMDG, IATA	U1V1 993
· UN proper shipping name	
$\cdot DOT$	Flammable liquids, n.o.s. (Toluene, Ethylbenzene, Cyclohexane,
	Xylenes)
· IMDG	FLAMMABLE LIQUID, N.O.S. (TOLUENE, ETHYLBENZENE,
	CYCLOHEXANE, XYLENES), MARINE POLLUTANT
\cdot IATA	FLAMMABLE LIQUID, N.O.S. (TOLUENE, ETHYLBENZENE,
	CYCLOHEXANE, XYLENES)

- · Transport hazard class(es)
- $\cdot DOT$



· Class 3 Flammable liquids

· Label

 \cdot *IMDG*



· Class 3 Flammable liquids

(Contd. on page 12)

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Trade name: Steam Cracked Naphtha

	(Contd. of page 1
· Label	3
· IATA	
· Class	3 Flammable liquids
· Label	3
· Packing group	
· DOT, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	Symbol (fish and tree)
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	<i>F-E</i> , <u><i>S-E</i></u>
· Transport in bulk according to Annex	II of
MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (TOLUENI
5	ETHYLBENZENE, CYCLOHEXANE, XYLENES), 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

All ingredients are listed.

· ISCA (Toxic	Substances	Control Act):
Toluene	•	•

Benzene

Ethylbenzene, Anhydrous, 99.8%

1,2,4-Trimethylbenzene

Cyclohexane

Xylene (Xylol)

Hexane

cumene

· Proposition 65

	2 i op osmon oc		
	· Chemicals kno	Chemicals known to cause cancer:	
I	CAS: 71-43-2	Benzene	
	CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	
	CAS: 98-82-8	cumene	

(Contd. on page 13)

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Trade name: Steam Cracked Naphtha

	Contd. of page 12)
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males:	
CAS: 71-43-2 Benzene	
· Chemicals known to cause developmental toxicity:	
CAS: 108-88-3 Toluene	
CAS: 71-43-2 Benzene	

· Carcinogenic categories

· EPA (Environm	· EPA (Environmental Protection Agency)	
CAS: 108-88-3	Toluene	II
CAS: 71-43-2	Benzene	A, K/L
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	D
CAS: 95-63-6	1,2,4-Trimethylbenzene	II
CAS: 110-82-7	Cyclohexane	I
CAS: 1330-20-7	Xylene (Xylol)	I
CAS: 110-54-3	Hexane	II
CAS: 98-82-8	cumene	D, CBD

· TLV (Threshold Limit Value established by ACGIH)		
CAS: 108-88-3	Toluene	A4
CAS: 71-43-2	Benzene	A1
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	A3
CAS: 1330-20-7	Xylene (Xylol)	A4

· NIOSH-Ca (National Institute for Occupational Safety and Health) CAS: 71-43-2 | Benzene

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms









GHS08

GHS02

GHS06

GHS07

· Signal word Danger

· Hazard-determining components of labeling:

Benzene

Toluene

Xylene (*Xylol*)

Ethylbenzene, Anhydrous, 99.8%

Hexane

Cyclohexane

1,2,4-Trimethylbenzene

cumene

· Hazard statements

Highly flammable liquid and vapor.

Toxic in contact with skin.

Causes skin irritation.

Causes serious eye irritation.

(Contd. on page 14)

Printing date 11/16/2017 Reviewed on 11/16/2017

Trade name: Steam Cracked Naphtha

(Contd. of page 13)

May cause genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure. May cause damage to the hearing organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Immediately call a poison center/doctor.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

Get medical advice/attention if you feel unwell.

Specific treatment (see on this label).

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep container tightly closed.

 $Store\ in\ a\ well-ventilated\ place.\ Keep\ cool.$

Store locked up.

 $Dispose\ of\ contents/container\ in\ accordance\ with\ local/regional/national/international\ regulations.$

· National regulations:

· Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact:

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Printing date 11/16/2017 Reviewed on 11/16/2017

Trade name: Steam Cracked Naphtha

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· Date of preparation / last revision

11-16-2017: review SDS for accuracy. STN Creation date for SDS 01-13-2016. STN 11/16/2017 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

 $Flam.\ Liq.\ 2: Flammable\ liquids-Category\ 2$

Acute Tox. 3: Acute toxicity – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Muta. 1B: Germ cell mutagenicity - Category 1B

Carc. 1A: Carcinogenicity - Category 1A

Repr. 2: Reproductive toxicity - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Asp. Tox. 1: Aspiration hazard - Category 1

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