NGEN NDUCTION CLEANER 8 FL.OZ.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 09/05/2014 : Version:

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

1.1. Product identifier

Product form : Mixture

Trade name : NGEN NDUCTION CLEANER 8 FL.OZ.

Product code : 71004

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Intake System Cleaner

1.3. Details of the supplier of the safety data sheet

The Next Generation Manufacturing, LLC
423 W. WESLEY
Wheaton, IL 60187
T 844-643-6776

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flam. Liq. 2 H225
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Carc. 2 H351
Repr. 2 H361
STOT SE 3 H336

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS02 GHS07 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H351 - Suspected of causing cancer
H361 - Suspected of damaging fertility or the unborn child

Precautionary statements (GHS-US) : P201 - Obtain special instructions
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
P261 - Avoid breathing dust,fume,gas,mist,vapor spray
P264 - Wash affected areas thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves,protective clothing,eye protection,face protection
P302+P352 - If on skin: Wash with plenty of soap and water
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned: Get medical advice/attention
P312 - Call a POISON CONTROL CENTER, doctor, if you feel unwell.
P321 - Specific treatment: See section 4.1 on this label
P332+P313 - If skin irritation occurs: Get medical advice/attention

P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse
P370+P378 - In case of fire: See Section 5.1 Extinguishing Media
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
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
xylene, mixture of isomers	(CAS No) 1330-20-7	40 - 80	Flam. Liq. 3, H226 Skin Irrit. 2, H315
4-hydroxy-4-methyl-2-pentanone	(CAS No) 123-42-2	10 - 30	Flam. Liq. 3, H226 Eye Irrit. 2A, H319
2-propanol	(CAS No) 67-63-0	10 - 30	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Toluene	(CAS No) 108-88-3	0.05 - 0.4	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. Suspected of causing cancer. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Suspected of damaging fertility or the unborn child.

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Harmful if swallowed. Irritation of the gastric/intestinal mucosa. Irritation of the oral mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Avoid breathing dust,fume,gas,mist,vapor spray.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Dam up the liquid spill.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No naked lights. No smoking. Use only non-sparking tools. Obtain special instructions . Do not handle until all safety precautions have been read and understood. Avoid breathing dust,fume,gas,mist,vapor spray. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash affected areas thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

4-hydroxy-4-methyl-2-pentanone (123-42-2)		
USA ACGIH	ACGIH TWA (ppm)	50 ppm

2-propanol (67-63-0)		
USA ACGIH	ACGIH TWA (mg/m³)	980 mg/m³
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (mg/m³)	1225 mg/m³
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm

xylene, mixture of isomers (1330-20-7)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA ACGIH	ACGIH STEL (ppm)	100 ppm

ethylbenzene (100-41-4)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA ACGIH	ACGIH STEL (ppm)	125 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	435 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	100
USA OSHA	OSHA PEL (STEL) (mg/m³)	545 mg/m³
USA OSHA	OSHA PEL (STEL) (ppm)	125 ppm

Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (mg/m³)	37 mg/m³
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (mg/m³)	560
USA ACGIH	ACGIH STEL (ppm)	150 ppm
USA ACGIH	ACGIH Ceiling (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm

8.2. Exposure controls

Appropriate engineering controls : Local exhaust venilation, vent hoods.

Personal protective equipment : Avoid all unnecessary exposure. Safety glasses. Gloves. Respiratory protection of the dependent type. Protective clothing. Protective goggles.

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear, colorless liquid.

Color : Colourless.

Odor : Solvent-like odour. Xylene.

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : 12 °C

Auto-ignition temperature : 398 °C

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density : No data available

Solubility : Water: < 20 %

Log Pow : No data available

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

VOC content : 100 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
LD50 oral rat	2520 mg/kg (3002 mg/kg bodyweight; Rat; Rat; Experimental value,3002 mg/kg bodyweight; Rat; Rat; Experimental value)
LD50 dermal rat	> 1875 mg/kg body weight (Rat; Experimental value,Rat; Experimental value)
LD50 dermal rabbit	13500 mg/kg (Rabbit)

2-propanol (67-63-0)	
LD50 oral rat	5045 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 5840 mg/kg bodyweight; Rat)
LD50 dermal rabbit	12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 16.4; Rabbit)
LC50 inhalation rat (mg/l)	73 mg/l/4h (Rat)

xylene, mixture of isomers (1330-20-7)	
LD50 oral rat	3523 - 8600 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 3523 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value; >4000 mg/kg bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 4200.000000 mg/kg (Rabbit; Experimental value,Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	29 mg/l/4h (Rat; Experimental value; 27.57 mg/l/4h; Rat; Experimental value)

ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg (Rat; Other; Experimental value)
LD50 dermal rabbit	15415 mg/kg (Rabbit; Literature study; Other; 15432 mg/kg; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	17.8 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	4000 ppm/4h (Rat; Literature study)

Toluene (108-88-3)	
LD50 oral rat	5580 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Literature study; 5580 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 5000 mg/kg body weight LD50 quoted as 14.1 mL/kg (12267 mg/kg using density of 0.87)
LC50 inhalation rat (mg/l)	> 28.1 mg/l/4h (Rat; Air, Literature study)

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

2-propanol (67-63-0)	
IARC group	3

xylene, mixture of isomers (1330-20-7)	
IARC group	3

ethylbenzene (100-41-4)	
IARC group	2B

Toluene (108-88-3)	
IARC group	3

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Harmful if swallowed. Irritation of the gastric/intestinal mucosa. Irritation of the oral mucous membranes.

SECTION 12: Ecological information

12.1. Toxicity

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
LC50 fish 1	8930 mg/l (48 h; Leuciscus idus)
LC50 other aquatic organisms 1	100 - 1000 mg/l (96 h)
EC50 Daphnia 1	9000 mg/l (24 h; Daphnia magna; Static system)
LC50 fish 2	420 mg/l (96 h; Lepomis macrochirus)
Threshold limit other aquatic organisms 1	100 - 1000,96 h; Protozoa
Threshold limit other aquatic organisms 2	1400 mg/l (72 h)
Threshold limit algae 1	530 mg/l (192 h; Microcystis aeruginosa)
Threshold limit algae 2	3000 mg/l (168 h; Scenedesmus quadricauda)

2-propanol (67-63-0)	
LC50 fish 1	4200 mg/l (96 h; Rasbora heteromorpha; Flow-through system)
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna)
LC50 fish 2	9640 mg/l (96 h; Pimephales promelas; Lethal)
EC50 Daphnia 2	13299 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	> 1000 mg/l (72 h; Scenedesmus subspicatus; Growth rate)
Threshold limit algae 2	1800 mg/l (72 h; Algae; Cell numbers)

xylene, mixture of isomers (1330-20-7)	
LC50 fish 1	13.5 mg/l (96 h; Lepomis macrochirus; Lethal)
EC50 Daphnia 1	150 mg/l (24 h; Daphnia magna)
LC50 fish 2	3.77 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	7.4 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	72 mg/l (336 h; Selenastrum capricornutum; Growth)
Threshold limit algae 2	10 mg/l (72 h; Skeletonema costatum)

ethylbenzene (100-41-4)	
LC50 fish 1	9.09 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 1	77 mg/l (24 h; Daphnia magna)
EC50 other aquatic organisms 1	48 mg/l (72 h; Scenedesmus subspicatus)
LC50 fish 2	4.2 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 2	75 mg/l (48 h; Daphnia magna)
TLM fish 1	29 ppm (96 h; Lepomis macrochirus; Hard water)
TLM fish 2	42.3 mg/l (96 h; Pimephales promelas)
TLM other aquatic organisms 1	10 - 100,96 h
Threshold limit algae 1	> 160 mg/l (192 h; Scenedesmus quadricauda; Toxicity test)
Threshold limit algae 2	33 mg/l (192 h; Microcystis aeruginosa; Toxicity test)

Toluene (108-88-3)	
LC50 fish 1	24 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	84 mg/l (24 h; Daphnia magna; Locomotor effect)
LC50 fish 2	13 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	11.5 - 19.6 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	> 400 mg/l (168 h; Scenedesmus quadricauda; Toxicity test)
Threshold limit algae 2	105 mg/l (192 h; Microcystis aeruginosa)

12.2. Persistence and degradability

NGEN NDUCTION CLEANER 8 FL.OZ.	
Persistence and degradability	Not established.

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.07 g O_2 /g substance
Chemical oxygen demand (COD)	2.11 g O_2 /g substance
ThOD	2.21 g O_2 /g substance
BOD (% of ThOD)	0.03 % ThOD

2-propanol (67-63-0)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.19 g O_2 /g substance
Chemical oxygen demand (COD)	2.23 g O_2 /g substance
ThOD	2.40 g O_2 /g substance
BOD (% of ThOD)	0.49 % ThOD

xylene, mixture of isomers (1330-20-7)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photolysis in the air.

ethylbenzene (100-41-4)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	1.44 g O_2 /g substance (20d.)
Chemical oxygen demand (COD)	2.1 g O_2 /g substance
ThOD	3.17 g O_2 /g substance
BOD (% of ThOD)	(20 day(s)) 45.4

Toluene (108-88-3)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	2.15 g O_2 /g substance
Chemical oxygen demand (COD)	2.52 g O_2 /g substance
ThOD	3.13 g O_2 /g substance
BOD (% of ThOD)	0.69 % ThOD

12.3. Bioaccumulative potential

NGEN NDUCTION CLEANER 8 FL.OZ.	
Bioaccumulative potential	Not established.

4-hydroxy-4-methyl-2-pentanone (123-42-2)	
Log Pow	-0.14 - 1.03 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

2-propanol (67-63-0)	
Log Pow	0.05 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

xylene, mixture of isomers (1330-20-7)	
BCF fish 1	15 8 weeks; Salmo gairdneri (Oncorhynchus mykiss)
BCF fish 2	7 - 26 (8 weeks; Oncorhynchus mykiss)
Log Pow	3.2 (Conclusion by analogy; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

ethylbenzene (100-41-4)	
BCF fish 1	1 (6 weeks; Oncorhynchus kisutch)
BCF fish 2	15 - 79 (Carassius auratus)
BCF other aquatic organisms 1	4.68 (Lamellibranchiata)

ethylbenzene (100-41-4)	
Log Pow	3.15 (Experimental value; 3.6; Experimental value; EU Method A.8; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Toluene (108-88-3)	
BCF fish 1	13.2 (Anguilla japonica)
BCF fish 2	90 (72 h; Leuciscus idus)
BCF other aquatic organisms 1	380 (24 h; Chlorella sp.; Fresh weight)
BCF other aquatic organisms 2	4.2 (Mytilus edulis; Fresh weight)
Log Pow	2.73 (Experimental value; Other; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

2-propanol (67-63-0)	
Surface tension	0.021 N/m (25 °C)

xylene, mixture of isomers (1330-20-7)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

ethylbenzene (100-41-4)	
Surface tension	0.029 N/m

Toluene (108-88-3)	
Surface tension	0.03 N/m (20 °C)

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): UN1993, Flammable liquids, n.o.s. (Xylenes,2-propanol,Diacetone), 3, II, Limited Quantity

ICAO/IATA (air): UN1993, Flammable liquids, n.o.s. (Xylenes,2-propanol,Diacetone), 3, II, Limited Quantity

IMO/IMDG (water): UN1993, Flammable liquids, n.o.s. (Xylenes,2-propanol,Diacetone), 3, II, Limited Quantity

Special Provisions: IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F).
TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Flammable liquids, n.o.s. (Xylenes,2-propanol,Diacetone)

Department of Transportation (DOT) Hazard Classes : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid

DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT)	:	II - Medium Danger
DOT Special Provisions (49 CFR 172.102)	:	IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F). TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	202
DOT Packaging Bulk (49 CFR 173.xxx)	:	242

14.3. Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) ‘‘On deck only’’ on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

SECTION 15: Regulatory information

15.1. US Federal regulations

NGEN NDUCTION CLEANER 8 FL.OZ.	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Fire hazard Delayed (chronic) health hazard Immediate (acute) health hazard

2-propanol (67-63-0)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard

xylene, mixture of isomers (1330-20-7)	
SARA Section 311/312 Hazard Classes	Fire hazard

ethylbenzene (100-41-4)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Delayed (chronic) health hazard

Toluene (108-88-3)	
Listed on United States SARA Section 313 Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard

15.2. International regulations

CANADA

NGEN NDUCTION CLEANER 8 FL.OZ.	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

2-propanol (67-63-0)	
WHMIS Classification	Class B Division 2 - Flammable Liquid

Toluene (108-88-3)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

EU-Regulations

NGEN NDUCTION CLEANER 8 FL.OZ.
Listed on ELINCS (European List of Notified Chemical Substances)

Toluene (108-88-3)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

F; R11
Xn; R20/21
Xi; R36/38

Full text of R-phrases: see section 16

15.2.2. National regulations

NGEN NDUCTION CLEANER 8 FL.OZ.
Listed on AICS (Australian Inventory of Chemical Substances) Listed on KECI (Korean Existing Chemicals Inventory)

15.3. US State regulations

NGEN NDUCTION CLEANER 8 FL.OZ.()	
State or local regulations	U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL) U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

ethylbenzene (100-41-4)
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

Toluene (108-88-3)
U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

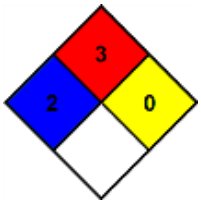
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	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
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard

Physical : 0 Minimal Hazard

Personal Protection : H

SDS US (GHS HazCom 2012) - Technical Chemical

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.