Decontamination Solution Concentrate

Safety Data Sheet

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

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product name	:	Decontamination Solution Concentrate
Product code	:	SS-133

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

Use of the substance/mixture	:	Cleansing product

1.3. Details of the supplier of the safety data sheet

ELITechGroup Inc.
370 West 1700 South
Logan, UT 84321 - USA
T +1 (435) 752-6011 - F +1 (435) 752-4127
qara_ebs@elitechgroup.com - www.elitechgroup.com

1.4. Emergency telephone number

Emergency number	:	Contact your distributor or poison control center in your country. InfoTrac Emergency Response: Calls within the USA, phone: 1-800-535-5053. Calls outside the USA, phone: +1 352-323-3500 (call collect) Customer ID: #90104 (NOTE: this number is required when a customer calls into either phone number above).

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flam. Liq. 3	H226 -	Flammable liquid and vapor
Skin Corr. 1	H314 -	Causes severe skin burns and eye damage
Skin Sens. 1	H317 -	May cause an allergic skin reaction
Carc. 2	H351 -	Suspected of causing cancer
Repr. 2	H361 -	Suspected of damaging fertility or the unborn child
STOT RE 2	H373 -	May cause damage to organs through prolonged or repeated exposure
Aquatic Chronic 1	H410 -	Very toxic to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :

GHS02 GHS05 GHS07 GHS08 GHS09

Signal word (GHS US) : Danger

Hazard statements (GHS US) :
H226 - Flammable liquid and vapor
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction
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
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS US) :
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P260 - Do not breathe mist, spray, vapors.
P264 - Wash hands and other exposed areas thoroughly after handling
P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
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.
P310 - Immediately call a doctor, a POISON CENTER.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use alcohol resistant foam, BC-powder, carbon dioxide (CO2), D-powder to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards not contributing to the classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions. May be corrosive to respiratory tract.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
phosphoric acid	(CAS-No.) 7664-38-2	10 – 40	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314
2-benzyl-4-chlorophenol	(CAS-No.) 120-32-1	10 – 30	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351 STOT RE 2, H373
2-propanol	(CAS-No.) 67-63-0	10 – 15	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
2-hydroxybiphenyl	(CAS-No.) 90-43-7	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Sodium octane-1-sulphonate	(CAS-No.) 5324-84-5	5 – 10	Skin Corr. 1B, H314 Eye Dam. 1, H318
sodium xylenesulfonate	(CAS-No.) 1300-72-7	1 – 5	Eye Irrit. 2, H319
Benzenesulfonic acid, C10-16-alkyl derivs.	(CAS-No.) 68584-22-5	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332

Full text of H- and EUH-statements: see section 16

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. If you feel unwell, seek medical advice (show the label where possible). Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation	:	May cause an allergic skin reaction.
Symptoms/effects after skin contact	:	Irritation. May cause an allergic skin reaction. Burns.
Symptoms/effects after eye contact	:	Serious damage to eyes.
Symptoms/effects after ingestion	:	Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Alcohol-resistant foam. Dry chemical powder. Carbon dioxide. Water spray. Dry powder. Foam.
Unsuitable extinguishing media	:	Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Flammable liquid and vapor.
Explosion hazard	:	May form flammable/explosive vapor-air mixture.
Reactivity	:	May be corrosive to metals. Reacts violently with (strong) oxidizers. The product is non-reactive under normal conditions of use, storage and transport. Flammable liquid and vapor.

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 attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Avoid contact with skin and eyes. Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures	:	Ventilate spillage area. Avoid contact with skin and eyes. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	:	Collect spillage.
Methods for cleaning up	:	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	:	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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. May be corrosive to metals.
Precautions for safe handling	:	Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat. Take precautionary measures against static discharge. Comply with applicable regulations. 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 : Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Metals.

Packaging materials : Store in corrosive resistant container with a resistant inner liner.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-propanol (67-63-0)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	400 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr; CNS impair
OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	400 ppm

phosphoric acid (7664-38-2)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
ACGIH	ACGIH STEL (mg/m³)	3 mg/m³
ACGIH	Remark (ACGIH)	URT, eye, & skin irr
OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

Personal protective equipment : Avoid all unnecessary exposure. Wear recommended personal protective equipment.

Hand protection : Wear protective gloves. Suitable gloves should be tested to EN 374. The glove material has to be impermeable and resistant to the product/the substance/the preparation. As the product is a preparation of several substances, the resistance and penetration time/breakthrough time of the glove material cannot be calculated/observed in advance and, therefore, has to be checked prior to the application. The following are recommended: materials - natural latex or nitrile; thickness: 4 to 6 mils (0.1 mm - 0.15 mm); minimum breakthrough time: 60 minutes.

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Wear respiratory protection.

Environmental exposure controls : Avoid release to the environment.

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 : Colorless to pale yellow liquid

Color : Colorless to light yellow

Odor : Characteristic; Mild odor

Odor threshold : No data available

pH : 0.25 (1% w/w dilution pH = 2.08)

Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	> 34 °C (Closed cup)
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	No data available
Explosion limits	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Vapor pressure	:	44 mm Hg
Relative density	:	No data available
Relative vapor density at 20 °C	:	No data available
Solubility	:	Soluble in water. Water: No data available
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

May be corrosive to metals. Reacts violently with (strong) oxidizers. The product is non-reactive under normal conditions of use, storage and transport. Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Protect from sunlight. Extremely high or low temperatures. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

metals. Strong acids. Strong bases. Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Decontamination Solution Concentrate	
LD50 oral rat	3129 mg/kg
LD50 dermal rat	> 5000 mg/kg
LC50 Inhalation - Rat	> 0.61 mg/l (Exposure time: 4 h)
ATE US (oral)	3129 mg/kg body weight

2-hydroxybiphenyl (90-43-7)	
LD50 oral rat	2733 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral)), Guideline: other:, Guideline: other:

2-hydroxybiphenyl (90-43-7)	
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:
LC50 Inhalation - Rat	> 0.949 mg/l air (Exposure time: 1 h)
ATE US (oral)	2733 mg/kg body weight

2-propanol (67-63-0)	
LD50 oral rat	5840 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	16400 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat [ppm]	> 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	5840 mg/kg body weight
ATE US (dermal)	16400000 mg/kg body weight

2-benzyl-4-chlorophenol (120-32-1)	
LD50 oral rat	3852 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	2.43 mg/l/4h (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
ATE US (oral)	3852 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	2.43 mg/l/4h
ATE US (dust, mist)	2.43 mg/l/4h

sodium xylenesulfonate (1300-72-7)	
LD50 oral rat	> 7000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 6.41 mg/l (Equivalent or similar to OECD 403, 232 minutes, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
LD50 oral rat	775 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
LC50 Inhalation - Rat	> 1.9 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
ATE US (oral)	775 mg/kg body weight
ATE US (dust, mist)	1.5 mg/l/4h

phosphoric acid (7664-38-2)	
LD50 oral rat	1250 mg/kg (Estimated)
LD50 dermal rabbit	2740 mg/kg body weight (Rabbit, Experimental value, Skin)
LC50 Inhalation - Rat	> 850 mg/m³ (Exposure time: 1h)
ATE US (oral)	1250 mg/kg body weight
ATE US (dermal)	2740 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns.

pH: 0.25 (1% w/w dilution pH = 2.08)

Serious eye damage/irritation : Assumed to cause serious eye damage

pH: 0.25 (1% w/w dilution pH = 2.08)

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Suspected of causing cancer.

2-hydroxybiphenyl (90-43-7)	
NOAEL (chronic,oral,animal/male,2 years)	200 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: other:, Guideline: other:, Guideline: other:, Remarks on results: other:
NOAEL (chronic,oral,animal/female,2 years)	≥ 647 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: other:, Guideline: other:, Guideline: other:, Remarks on results: other:
IARC group	3 - Not classifiable

2-propanol (67-63-0)	
IARC group	3 - Not classifiable

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

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
NOAEL (oral,rat,90 days)	500 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (dermal,rat/rabbit,90 days)	> 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Sodium octane-1-sulphonate (5324-84-5)	
NOAEL (oral,rat,90 days)	> 430 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified

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

Symptoms/effects after inhalation : May cause an allergic skin reaction.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction. Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Very toxic to aquatic life with long lasting effects.

Ecology - water : Very toxic to aquatic life with long lasting effects.

Decontamination Solution Concentrate	
LC50 fish 1	5.263 mg/l (Exposure time: 96 h; Species: Fathead minnows)

2-hydroxybiphenyl (90-43-7)	
LC50 fish 1	4.5 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
LOEC (chronic)	0.022 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.009 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.036 mg/l Test organisms (species): Pimephales promelas Duration: '21 d'

2-propanol (67-63-0)	
LC50 fish 1	9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 Daphnia 1	10000 mg/l (48 h; Daphnia magna)
LC50 fish 2	9640 mg/l Test organisms (species): Pimephales promelas

2-benzyl-4-chlorophenol (120-32-1)	
LC50 fish 1	0.238 mg/l (96 h, Lepomis macrochirus)
EC50 Daphnia 1	0.546 mg/l (48 h, Daphnia magna)
ErC50 (algae)	0.1972 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Experimental value)

sodium xylenesulfonate (1300-72-7)	
LC50 fish 1	> 1000 mg/l (EPA OTS 797.1400, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
EC50 Daphnia 1	> 1000 mg/l (EPA OTS 797.1300, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
LC50 fish 1	3 mg/l (Exposure time: 96 h - Species Oncorhynchus mykiss [static])
EC50 Daphnia 1	2.9 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 (algae)	170 mg/l (Exposure time: 96 h - Species: Selenastrum capricornutum)

phosphoric acid (7664-38-2)	
LC50 fish 1	75.1 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Static system, Fresh water, Experimental value, Lethal)
EC50 Daphnia 1	> 100 mg/l Test organisms (species): Daphnia magna

Sodium octane-1-sulphonate (5324-84-5)	
LC50 fish 1	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 Daphnia 1	421 mg/l Test organisms (species): Daphnia magna

12.2. Persistence and degradability

Decontamination Solution Concentrate	
Persistence and degradability	May cause long-term adverse effects in the environment.

2-hydroxybiphenyl (90-43-7)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
ThOD	2.6 g O_2/g substance

2-propanol (67-63-0)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.19 g O_2/g substance
Chemical oxygen demand (COD)	2.23 g O_2/g substance
ThOD	2.4 g O_2/g substance

2-benzyl-4-chlorophenol (120-32-1)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in water. Inherently biodegradable.
Biochemical oxygen demand (BOD)	0.792 g O_2/g substance
Chemical oxygen demand (COD)	2.17 g O_2/g substance

sodium xylenesulfonate (1300-72-7)	
Persistence and degradability	Readily biodegradable in water.

phosphoric acid (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

Sodium octane-1-sulphonate (5324-84-5)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Decontamination Solution Concentrate	
Bioaccumulative potential	Not established.

2-hydroxybiphenyl (90-43-7)	
Partition coefficient n-octanol/water (Log Pow)	2.6 – 3.4
Bioaccumulative potential	No bioaccumulation data available.

2-propanol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

2-benzyl-4-chlorophenol (120-32-1)	
BCF fish 1	107 – 110 (OECD 305: Bioconcentration: Flow-Through Fish Test, 15 day(s), Danio rerio, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	4.276 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

sodium xylenesulfonate (1300-72-7)	
Partition coefficient n-octanol/water (Log Pow)	-3.12 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)	
Partition coefficient n-octanol/water (Log Pow)	2 (at 23°C)

phosphoric acid (7664-38-2)	
Bioaccumulative potential	Not bioaccumulative.

Sodium octane-1-sulphonate (5324-84-5)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

2-propanol (67-63-0)	
Surface tension	No data available (test not performed)
Partition coefficient n-octanol/water (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

2-benzyl-4-chlorophenol (120-32-1)	
Surface tension	57.3 mN/m (20 °C, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Koc)	3.43 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for mobility in soil.

sodium xylenesulfonate (1300-72-7)	
Surface tension	71 mN/m (20 °C, 90 %, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Koc)	1.42 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

phosphoric acid (7664-38-2)	
Surface tension	Not applicable (solid)
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information : Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3082 Environmentally hazardous substances, liquid, n.o.s. (O-PHENYLPHENOL, OBENZYL-P-CHLOROPHENOL), 9, III

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.
O-PHENYLPHENOL, OBENZYL-P-CHLOROPHENOL

Class (DOT) : 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)

Packing group (DOT) : III - Minor Danger

Dangerous for the environment : Yes

Marine pollutant : Yes

DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	241
DOT Symbols	:	G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	:	8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies. 146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination. 173 - An appropriate generic entry may be used for this material. 335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). 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, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(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. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, 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)	:	155
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	No limit
DOT Vessel Stowage Location	:	A - The material may be stowed ''on deck'' or ''under deck'' on a cargo vessel and on a passenger vessel.
Emergency Response Guide (ERG) Number	:	171
Other information	:	No supplementary information available.

Transportation of Dangerous Goods

No additional information available

Transport by sea

UN-No. (IMDG)	:	3082
Proper Shipping Name (IMDG)	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class (IMDG)	:	9 - Miscellaneous dangerous substances and articles
Packing group (IMDG)	:	III - substances presenting low danger

Air transport

UN-No. (IATA)	:	3082
Proper Shipping Name (IATA)	:	Environmentally hazardous substance, liquid, n.o.s.
Class (IATA)	:	9 - Miscellaneous Dangerous Substances and Articles
Packing group (IATA)	:	III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

2-hydroxybiphenyl (90-43-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 %

2-propanol (67-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1 %

2-benzyl-4-chlorophenol (120-32-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

sodium xylenesulfonate (1300-72-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

phosphoric acid (7664-38-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	5000 lb

Sodium octane-1-sulphonate (5324-84-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

2-hydroxybiphenyl (90-43-7)
Listed on the Canadian DSL (Domestic Substances List)

2-propanol (67-63-0)
Listed on the Canadian DSL (Domestic Substances List)

Benzenesulfonic acid, C10-16-alkyl derivs. (68584-22-5)
Listed on the Canadian DSL (Domestic Substances List)

phosphoric acid (7664-38-2)
Listed on the Canadian DSL (Domestic Substances List)

Sodium octane-1-sulphonate (5324-84-5)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

This product can expose you to 2-hydroxybiphenyl, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

2-hydroxybiphenyl (90-43-7)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
U.S. - California - Proposition 65 - Other information		No NSRL data available at www.P65Warnings.ca.gov		

2-hydroxybiphenyl (90-43-7)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

2-propanol (67-63-0)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

phosphoric acid (7664-38-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory 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
H410	Very toxic to aquatic life with long lasting effects

SDS US Custom - EBS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Reason For Change: updating to latest GHS format and updating chemical information.