

## 1. Identification

**Other means of identification** 120 SmartSoaker  
**Product identifier** SS-C4000H (120)  
**Recommended use** High pH Vehicle wash Pre-Soak  
**Recommended restrictions** None known.  
**Manufacturer/Importer/Supplier/Distributor information**  
**Manufacturer**  
**Company name** Smart Solutions  
**Address** 12 Corporate Plaza Dr Suite 150  
Newport Beach, Ca 92660  
**Telephone** 949-722-4500  
**E-mail** Not available.  
**Emergency phone number** 800-424-9300 CHEMTREC

## 2. Hazard(s) identification

**Physical hazards** Not classified.  
**Health hazards** Skin corrosion/irritation Category 1  
Serious eye damage/eye irritation Category 1  
Specific target organ toxicity, single exposure Category 3 respiratory tract irritation  
**Environmental hazards** Not classified.  
**OSHA defined hazards** Not classified.  
**Label elements**



**Signal word** Danger  
**Hazard statement** Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.  
**Precautionary statement**  
**Prevention** Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.  
**Response** If swallowed: Rinse mouth. Do NOT induce vomiting. 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. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.  
**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up.  
**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Hazard(s) not otherwise classified (HNOC)** None known.  
**Supplemental information** 29.21% of the mixture consists of component(s) of unknown acute oral toxicity. 76.44% of the mixture consists of component(s) of unknown acute inhalation toxicity.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name                                      | Common name and synonyms | CAS number | %      |
|----------------------------------------------------|--------------------------|------------|--------|
| SODIUM HYDROXIDE (NA(OH))                          |                          | 1310-73-2  | 22.425 |
| BENZENESULFONIC ACID, DIMETHYL-, SODIUM SALT (1 1) |                          | 1300-72-7  | 2.6978 |

| Chemical name                            | Common name and synonyms | CAS number | %       |
|------------------------------------------|--------------------------|------------|---------|
| BENZENE, METHYL-                         |                          | 108-88-3   | 0.0552  |
| BENZENE                                  |                          | 71-43-2    | 0.0069  |
| BENZENE, (1-METHYLETHYL)-                |                          | 98-82-8    | 0.0001  |
| BENZENE, ETHYL-                          |                          | 100-41-4   | 0.0001  |
| Other components below reportable levels |                          |            | 74.8149 |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

|                                                                               |                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                                             | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.                                                                                                                                                            |
| <b>Skin contact</b>                                                           | Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.                                                                                 |
| <b>Eye contact</b>                                                            | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.                                                                                                              |
| <b>Ingestion</b>                                                              | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.                                                                                                                            |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.                                                            |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed. |
| <b>General information</b>                                                    | If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.                                                                                                                    |

#### 5. Fire-fighting measures

|                                                                      |                                                                                               |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).                                   |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| <b>Specific hazards arising from the chemical</b>                    | During fire, gases hazardous to health may be formed.                                         |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk.                                 |
| <b>Specific methods</b>                                              | Use standard firefighting procedures and consider the hazards of other involved materials.    |
| <b>General fire hazards</b>                                          | No unusual fire or explosion hazards noted.                                                   |

#### 6. Accidental release measures

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.                                                                                             |
| <b>Methods and materials for containment and cleaning up</b>               | <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. For waste disposal, see section 13 of the SDS.</p> |
| <b>Environmental precautions</b>                                           | Avoid discharge into drains, water courses or onto the ground.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## 7. Handling and storage

### Precautions for safe handling

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

### Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| Components            | Type | Value |
|-----------------------|------|-------|
| BENZENE (CAS 71-43-2) | STEL | 5 ppm |
|                       | TWA  | 1 ppm |

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components                                | Type | Value     |
|-------------------------------------------|------|-----------|
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)   | PEL  | 245 mg/m3 |
| BENZENE, ETHYL- (CAS 100-41-4)            | PEL  | 50 ppm    |
|                                           |      | 435 mg/m3 |
| SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2) | PEL  | 100 ppm   |
|                                           |      | 2 mg/m3   |

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

| Components                      | Type    | Value   |
|---------------------------------|---------|---------|
| BENZENE (CAS 71-43-2)           | Ceiling | 25 ppm  |
|                                 | TWA     | 10 ppm  |
| BENZENE, METHYL- (CAS 108-88-3) | Ceiling | 300 ppm |
|                                 | TWA     | 200 ppm |

#### US. ACGIH Threshold Limit Values

| Components                                | Type    | Value   |
|-------------------------------------------|---------|---------|
| BENZENE (CAS 71-43-2)                     | STEL    | 2.5 ppm |
|                                           | TWA     | 0.5 ppm |
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)   | TWA     | 50 ppm  |
|                                           |         |         |
| BENZENE, ETHYL- (CAS 100-41-4)            | TWA     | 20 ppm  |
| BENZENE, METHYL- (CAS 108-88-3)           | TWA     | 20 ppm  |
| SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2) | Ceiling | 2 mg/m3 |

#### US. NIOSH: Pocket Guide to Chemical Hazards

| Components                              | Type | Value     |
|-----------------------------------------|------|-----------|
| BENZENE (CAS 71-43-2)                   | STEL | 1 ppm     |
|                                         | TWA  | 0.1 ppm   |
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | TWA  | 245 mg/m3 |
|                                         |      |           |
| BENZENE, ETHYL- (CAS 100-41-4)          | STEL | 50 ppm    |
|                                         |      | 545 mg/m3 |
|                                         | TWA  | 125 ppm   |
|                                         |      | 435 mg/m3 |
| BENZENE, METHYL- (CAS 108-88-3)         | STEL | 100 ppm   |
|                                         |      | 560 mg/m3 |
|                                         |      | 150 ppm   |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components                                   | Type    | Value     |
|----------------------------------------------|---------|-----------|
| SODIUM HYDROXIDE<br>(NA(OH)) (CAS 1310-73-2) | TWA     | 375 mg/m3 |
|                                              |         | 100 ppm   |
|                                              | Ceiling | 2 mg/m3   |

**Biological limit values**
**ACGIH Biological Exposure Indices**

| Components                         | Value     | Determinant                                               | Specimen               | Sampling Time |
|------------------------------------|-----------|-----------------------------------------------------------|------------------------|---------------|
| BENZENE (CAS 71-43-2)              | 25 µg/g   | S-Phenylmercap-<br>turic acid                             | Creatinine in<br>urine | *             |
| BENZENE, ETHYL- (CAS<br>100-41-4)  | 0.15 g/g  | Sum of<br>mandelic acid<br>and<br>phenylglyoxylic<br>acid | Creatinine in<br>urine | *             |
| BENZENE, METHYL- (CAS<br>108-88-3) | 0.3 mg/g  | o-Cresol, with<br>hydrolysis                              | Creatinine in<br>urine | *             |
|                                    | 0.03 mg/l | Toluene                                                   | Urine                  | *             |
|                                    | 0.02 mg/l | Toluene                                                   | Blood                  | *             |

\* - For sampling details, please see the source document.

**Exposure guidelines**
**US - California OELs: Skin designation**

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| BENZENE (CAS 71-43-2)                   | Can be absorbed through the skin. |
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | Can be absorbed through the skin. |
| BENZENE, METHYL- (CAS 108-88-3)         | Can be absorbed through the skin. |

**US - Minnesota Haz Subs: Skin designation applies**

|                                         |                           |
|-----------------------------------------|---------------------------|
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | Skin designation applies. |
| BENZENE, METHYL- (CAS 108-88-3)         | Skin designation applies. |

**US - Tennessee OELs: Skin designation**

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | Can be absorbed through the skin. |
|-----------------------------------------|-----------------------------------|

**US ACGIH Threshold Limit Values: Skin designation**

|                       |                                   |
|-----------------------|-----------------------------------|
| BENZENE (CAS 71-43-2) | Can be absorbed through the skin. |
|-----------------------|-----------------------------------|

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | Can be absorbed through the skin. |
|-----------------------------------------|-----------------------------------|

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

|                                         |                                   |
|-----------------------------------------|-----------------------------------|
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | Can be absorbed through the skin. |
|-----------------------------------------|-----------------------------------|

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appropriate engineering controls</b> | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product. |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Individual protection measures, such as personal protective equipment**

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

|                |                |
|----------------|----------------|
| Physical state | Liquid.        |
| Form           | Liquid.        |
| Color          | CLEAR YELLOW   |
| Odor           | CHARACTERISTIC |

|                                         |                                 |
|-----------------------------------------|---------------------------------|
| Odor threshold                          | Not available.                  |
| pH                                      | 12.6                            |
| Melting point/freezing point            | Not available.                  |
| Initial boiling point and boiling range | 776.23 °F (413.46 °C) estimated |
| Flash point                             | Not available.                  |
| Evaporation rate                        | Not available.                  |
| Flammability (solid, gas)               | Not applicable.                 |

### Upper/lower flammability or explosive limits

|                                |                |
|--------------------------------|----------------|
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%)    | Not available. |
| Explosive limit - upper (%)    | Not available. |

|                  |                |
|------------------|----------------|
| Vapor pressure   | Not available. |
| Vapor density    | Not available. |
| Relative density | Not available. |

### Solubility(ies)

|                    |                |
|--------------------|----------------|
| Solubility (water) | Not available. |
|--------------------|----------------|

|                                         |                |
|-----------------------------------------|----------------|
| Partition coefficient (n-octanol/water) | Not available. |
|-----------------------------------------|----------------|

|                           |                |
|---------------------------|----------------|
| Auto-ignition temperature | Not available. |
|---------------------------|----------------|

|                           |                |
|---------------------------|----------------|
| Decomposition temperature | Not available. |
|---------------------------|----------------|

|           |                |
|-----------|----------------|
| Viscosity | Not available. |
|-----------|----------------|

### Other information

|                      |                            |
|----------------------|----------------------------|
| Density              | 10.48 lbs/gal<br>1.26 g/ml |
| Explosive properties | Not explosive.             |
| Oxidizing properties | Not oxidizing.             |
| Percent volatile     | 69.72 % estimated          |
| Specific gravity     | 1.26                       |
| VOC                  | 0.06 % estimated           |

## 10. Stability and reactivity

|                                    |                                                                                               |
|------------------------------------|-----------------------------------------------------------------------------------------------|
| Reactivity                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability                 | Material is stable under normal conditions.                                                   |
| Possibility of hazardous reactions | Hazardous polymerization does not occur.                                                      |
| Conditions to avoid                | Contact with incompatible materials.                                                          |
| Incompatible materials             | Strong acids.                                                                                 |
| Hazardous decomposition products   | No hazardous decomposition products are known.                                                |

## 11. Toxicological information

### Information on likely routes of exposure

|              |                                                                                      |
|--------------|--------------------------------------------------------------------------------------|
| Inhalation   | May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |
| Skin contact | Causes severe skin burns.                                                            |
| Eye contact  | Causes serious eye damage.                                                           |
| Ingestion    | Causes digestive tract burns.                                                        |

**Symptoms related to the physical, chemical and toxicological characteristics** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

### Information on toxicological effects

**Acute toxicity** Not known.

| Components                              | Species | Test Results |
|-----------------------------------------|---------|--------------|
| BENZENE (CAS 71-43-2)                   |         |              |
| <u>Acute</u>                            |         |              |
| Oral                                    |         |              |
| LD50                                    | Rat     | 3306 mg/kg   |
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) |         |              |
| <u>Acute</u>                            |         |              |
| Oral                                    |         |              |
| LD50                                    | Rat     | 1400 mg/kg   |
| BENZENE, ETHYL- (CAS 100-41-4)          |         |              |
| <u>Acute</u>                            |         |              |
| Oral                                    |         |              |
| LD50                                    | Rat     | 3500 mg/kg   |
| BENZENE, METHYL- (CAS 108-88-3)         |         |              |
| <u>Acute</u>                            |         |              |
| Oral                                    |         |              |
| LD50                                    | Rat     | 2.6 g/kg     |

**Skin corrosion/irritation** Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation** Causes serious eye damage.

### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

|                                         |                                                     |
|-----------------------------------------|-----------------------------------------------------|
| BENZENE (CAS 71-43-2)                   | 1 Carcinogenic to humans.                           |
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | 2B Possibly carcinogenic to humans.                 |
| BENZENE, ETHYL- (CAS 100-41-4)          | 2B Possibly carcinogenic to humans.                 |
| BENZENE, METHYL- (CAS 108-88-3)         | 3 Not classifiable as to carcinogenicity to humans. |

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

|                       |        |
|-----------------------|--------|
| BENZENE (CAS 71-43-2) | Cancer |
|-----------------------|--------|

#### US. National Toxicology Program (NTP) Report on Carcinogens

|                                         |                                                  |
|-----------------------------------------|--------------------------------------------------|
| BENZENE (CAS 71-43-2)                   | Known To Be Human Carcinogen.                    |
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | Reasonably Anticipated to be a Human Carcinogen. |

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components                                |      | Species                                             | Test Results                 |
|-------------------------------------------|------|-----------------------------------------------------|------------------------------|
| BENZENE (CAS 71-43-2)                     |      |                                                     |                              |
| Aquatic                                   |      |                                                     |                              |
| Crustacea                                 | EC50 | Water flea (Daphnia magna)                          | 8.76 - 15.6 mg/l, 48 hours   |
| Fish                                      | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 7.2 - 11.7 mg/l, 96 hours    |
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)   |      |                                                     |                              |
| Aquatic                                   |      |                                                     |                              |
| Crustacea                                 | EC50 | Brine shrimp (Artemia sp.)                          | 3.55 - 11.29 mg/l, 48 hours  |
| Fish                                      | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 2.7 mg/l, 96 hours           |
| BENZENE, ETHYL- (CAS 100-41-4)            |      |                                                     |                              |
| Aquatic                                   |      |                                                     |                              |
| Crustacea                                 | EC50 | Water flea (Daphnia magna)                          | 1.37 - 4.4 mg/l, 48 hours    |
| Fish                                      | LC50 | Fathead minnow (Pimephales promelas)                | 7.5 - 11 mg/l, 96 hours      |
| BENZENE, METHYL- (CAS 108-88-3)           |      |                                                     |                              |
| Aquatic                                   |      |                                                     |                              |
| Crustacea                                 | EC50 | Water flea (Daphnia magna)                          | 5.46 - 9.83 mg/l, 48 hours   |
| Fish                                      | LC50 | Coho salmon,silver salmon (Oncorhynchus kisutch)    | 8.11 mg/l, 96 hours          |
| SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2) |      |                                                     |                              |
| Aquatic                                   |      |                                                     |                              |
| Crustacea                                 | EC50 | Water flea (Ceriodaphnia dubia)                     | 34.59 - 47.13 mg/l, 48 hours |
| Fish                                      | LC50 | Western mosquitofish (Gambusia affinis)             | 125 mg/l, 96 hours           |

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

|                                                   |      |
|---------------------------------------------------|------|
| Partition coefficient n-octanol / water (log Kow) |      |
| BENZENE                                           | 2.13 |
| BENZENE, (1-METHYLETHYL)-                         | 3.66 |
| BENZENE, ETHYL-                                   | 3.15 |
| BENZENE, METHYL-                                  | 2.73 |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

|                                              |                                                                                                                                                                                                                  |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.                         |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.                                                                                                                                                           |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.                                                                                                   |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.       |

## 14. Transport information

### DOT

|           |        |
|-----------|--------|
| UN number | UN1824 |
|-----------|--------|

**UN proper shipping name** SODIUM HYDROXIDE SOLUTION  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** II  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**ERG number** 154  
 Transportation information on packaging may be different from that listed.

#### IATA

**UN number** UN1824  
**UN proper shipping name** SODIUM HYDROXIDE SOLUTION  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** II  
**Environmental hazards** No.  
**ERG Code** 154  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

**UN number** UN1824  
**UN proper shipping name** SODIUM HYDROXIDE SOLUTION (SODIUM HYDROXIDE (NA(OH)))  
**Transport hazard class(es)**  
**Class** 8  
**Subsidiary risk** -  
**Packing group** II  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-A, S-B  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### DOT



#### IATA; IMDG



### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

BENZENE (CAS 71-43-2) Listed.  
 BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) Listed.

|                                           |         |
|-------------------------------------------|---------|
| BENZENE, ETHYL- (CAS 100-41-4)            | Listed. |
| BENZENE, METHYL- (CAS 108-88-3)           | Listed. |
| SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2) | Listed. |

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

|                       |                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|
| BENZENE (CAS 71-43-2) | Cancer<br>Central nervous system<br>Blood<br>Aspiration<br>Skin<br>Eye<br>respiratory tract irritation<br>Flammability |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical**      **Yes**

|                                     |                                                                                                                                                                                |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Classified hazard categories</b> | Acute toxicity (any route of exposure)<br>Skin corrosion or irritation<br>Serious eye damage or eye irritation<br>Specific target organ toxicity (single or repeated exposure) |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

BENZENE (CAS 71-43-2)  
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)  
BENZENE, ETHYL- (CAS 100-41-4)  
BENZENE, METHYL- (CAS 108-88-3)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**      Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

|                                 |      |
|---------------------------------|------|
| BENZENE, METHYL- (CAS 108-88-3) | 6594 |
|---------------------------------|------|

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

|                                 |        |
|---------------------------------|--------|
| BENZENE, METHYL- (CAS 108-88-3) | 35 %WV |
|---------------------------------|--------|

**DEA Exempt Chemical Mixtures Code Number**

|                                 |     |
|---------------------------------|-----|
| BENZENE, METHYL- (CAS 108-88-3) | 594 |
|---------------------------------|-----|

**US state regulations**

**California Proposition 65**



**WARNING:** This product can expose you to chemicals including BENZENE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

|                                         |                           |
|-----------------------------------------|---------------------------|
| BENZENE (CAS 71-43-2)                   | Listed: February 27, 1987 |
| BENZENE, (1-METHYLETHYL)- (CAS 98-82-8) | Listed: April 6, 2010     |
| BENZENE, ETHYL- (CAS 100-41-4)          | Listed: June 11, 2004     |

**California Proposition 65 - CRT: Listed date/Developmental toxin**

|                                 |                           |
|---------------------------------|---------------------------|
| BENZENE (CAS 71-43-2)           | Listed: December 26, 1997 |
| BENZENE, METHYL- (CAS 108-88-3) | Listed: January 1, 1991   |

**California Proposition 65 - CRT: Listed date/Male reproductive toxin**

|                       |                           |
|-----------------------|---------------------------|
| BENZENE (CAS 71-43-2) | Listed: December 26, 1997 |
|-----------------------|---------------------------|

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

BENZENE (CAS 71-43-2)  
BENZENE, (1-METHYLETHYL)- (CAS 98-82-8)  
BENZENE, ETHYL- (CAS 100-41-4)  
BENZENE, METHYL- (CAS 108-88-3)  
SODIUM HYDROXIDE (NA(OH)) (CAS 1310-73-2)

**International Inventories**

| Country(s) or region        | Inventory name                                                         | On inventory (yes/no)* |
|-----------------------------|------------------------------------------------------------------------|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)                                         | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | Yes                    |
| Korea                       | Existing Chemicals List (ECL)                                          | Yes                    |
| New Zealand                 | New Zealand Inventory                                                  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| Taiwan                      | Taiwan Toxic Chemical Substances (TCS)                                 | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Issue date</b>    | 09-05-2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Version #</b>     | 01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>HMIS® ratings</b> | Health: 3<br>Flammability: 0<br>Physical hazard: 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>NFPA ratings</b>  | Health: 3<br>Flammability: 0<br>Instability: 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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