



**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name:</b>	<b>IntelliPlex HPV bDNA Genotyping Kit</b>
<b>Manufacturer/Supplier:</b>	<b>PlexBio Co., Ltd.</b> 6F-1, No. 351 Yangguang Street, Neihu District, Taipei 114 Taiwan, R.O.C. Tel: (02) 2627-5878 Fax: (02) 2627-5979

**SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS**

Kit Contents	Known Hazardous Components	CAS#	Concentration
HPV bDNA KIT WR	Sodium dodecyl sulfate	151-21-3	1-5%
	Lithium chloride	7447-41-8	<3%
HPV bDNA KIT A1 Buffer	Sodium Azide	26628-22-8	<0.1%
	Tetramethylammonium chloride	75-57-0	2.5-3.5M
	Sodium N-lauroylsarcosinate	137-16-6	<0.1%
HPV bDNA KIT A2 Buffer	Sodium Azide	26628-22-8	<0.1%
	Tetramethylammonium chloride	75-57-0	2.5-3.5M
	Sodium N-lauroylsarcosinate	137-16-6	<0.1%
HPV bDNA KIT A3 Buffer	Sodium Azide	26628-22-8	<0.1%
	Tetramethylammonium chloride	75-57-0	2.5-3.5M
	Sodium N-lauroylsarcosinate	137-16-6	<0.1%
HPV bDNA KIT SA-PE	Sodium Azide	26628-22-8	<0.1%
HPV bDNA KIT Proteinase K	Proteinase K	39450-01-6	1-10 mg/ml
HPV bDNA KIT POS Control	Not Hazardous	-	-
HPV bDNA KIT 10X Wash Buffer	Sodium Azide	26628-22-8	0.10%
HPV bDNA KIT Sample Collection Buffer	Methanol	67-56-1	30-60%
HPV bDNA KIT πCode MicroDisc	Sodium Azide	26628-22-8	<0.1%

**SECTION 3: HAZARD IDENTIFICATION**

**1. Sodium dodecyl sulfate**

**Emergency Overview:**

**OSHA Hazards:** Flammable solid, Target Organ Effect, Harmful by ingestion., Toxic by skin absorption, Irritant

**Target Organs:** Lungs

**GHS Classification:** Skin irritation (Category 2)  
Eye irritation (Category 2A)  
Respiratory sensitization (Category 1)

**GHS Label elements, including precautionary statements:**

**Pictogram:**



**Signal word:**

Danger

**Hazard statement(s):**

**H228** Flammable solid.  
**H302** Harmful if swallowed.  
**H311** Toxic in contact with skin  
**H315** Causes skin irritation  
**H319** Causes serious eye irritation.  
**H335** May cause respiratory irritation.  
**H401** Toxic to aquatic life.

**Precautionary statement(s):**

**P210** Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
**P216** Avoid breathing dust/fume/gas/mist/vapours/spray.  
**P280** Wear protective gloves/protective clothing  
**P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P312** Call a POISON CENTER or doctor/physician if you feel unwell.

**HMIS Code:** (Health: 2) (Flammability: 3) (Physical: 1)

**NFPA Code:** (Health: 2) (Fire:3) (Reactivity: 1)

**Potential Health Effects:**

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin:** Toxic if absorbed through skin. Causes skin irritation  
**Eyes:** Causes eye irritation.  
**Ingestion:** Harmful if swallowed.

## 2. Lithium chloride

**Emergency Overview:**

**OSHA Hazards:**

**Target Organs:**

**GHS Classification:** Skin irritation (Category 2), H315  
 Eye irritation (Category 2), H319  
 Acute toxicity, Oral (Category 4), H302

**GHS Label elements, including precautionary statements:**

**Pictogram:**



**Signal word:**

Warning

**Hazard statement(s):**

**H302** Harmful if swallowed.  
**H315** Causes skin irritation.  
**H319** Causes serious eye irritation.

**Precautionary statement(s):**

**P301 + P312 + P330** IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.  
**P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**HMIS Code:**

**NFPA Code:**  
**Potential Health Effects:**  
**Inhalation:**  
**Skin:**  
**Eyes:**  
**Ingestion:**

### 3. Tetramethylammonium chloride

**Emergency Overview:** Not available.  
**OSHA Hazards:** Not available.  
**Target Organs:** Not available.  
**GHS Classification:** Acute toxicity, Oral (Category 3), H301  
 Acute toxicity, Dermal (Category 3), H311  
 Skin irritation (Category 2), H315  
 Specific target organ toxicity - single exposure (Category 1), H370  
 Chronic aquatic toxicity (Category 2), H411

**GHS Label elements, including precautionary statements:**

**Pictogram:**



**Signal word:** Danger

**Hazard statement(s):**  
**H301 + H311** Toxic if swallowed or in contact with skin  
**H315** Causes skin irritation.  
**H370** Causes damage to organs  
**H411** Toxic to aquatic life with long lasting effects

**Precautionary statement(s):**  
**P260** Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
**P273** Avoid release to the environment.  
**P280** Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**P301 + P310 + P330** IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.  
**P302 + P352 + P312** IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/ physician if you feel unwell.  
**P308 + P311** IF exposed or concerned: Call a POISON CENTER or doctor/ physician

**HMIS Code:** Not available.

**NFPA Code:** Not available.

**Potential Health Effects:**  
**Inhalation:** Not available.  
**Skin:** Not available.  
**Eyes:** Not available.  
**Ingestion:** Not available.

### 4. Sodium N-lauroylsarcosinate

**Emergency Overview:**  
**OSHA Hazards:** Not available.  
**Target Organs:** Not available.

**GHS Classification:** Acute toxicity, Inhalation (Category 2), H330  
 Skin irritation (Category 2), H315  
 Serious eye damage (Category 1), H318

**GHS Label elements, including precautionary statements:**

**Pictogram:**



**Signal word:** Danger

**Hazard statement(s):**

**H315** Causes skin irritation.  
**H318** Causes serious eye damage  
**H330** Fatal if inhaled.

**Precautionary statement(s):**

**P260** Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
**P280** Wear protective gloves/ eye protection/ face protection.  
**P284** Wear respiratory protection  
**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 POISON CENTER or doctor/ physician

**HMIS Code:** Not available.

**NFPA Code:** Not available.

**Potential Health Effects:**

**Inhalation:** Not available.  
**Skin:** Not available.  
**Eyes:** Not available.  
**Ingestion:** Not available.

## 5. Proteinase K

**Emergency Overview:**

**OSHA Hazards:** Target Organ Effect, Respiratory sensitizer, Irritant

**Target Organs:** Lungs

**GHS Classification:** Skin irritation (Category 2)  
 Eye irritation (Category 2A)  
 Respiratory sensitization (Category 1)

**GHS Label elements, including precautionary statements:**

**Pictogram:**



**Signal word:** Danger

**Hazard statement(s):**

**H315** Causes skin irritation.  
**H319** Causes serious eye irritation.  
**H334** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Precautionary statement(s):**

**P261** Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
**P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P342 + P311** If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

**HMIS Code:** (Health: 3) (Flammability: 0) (Reactivity: 0)

**NFPA Code:** (Health: 3) (Flammability: 0) (Reactivity: 0)

**Potential Health Effects:**

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.  
**Skin:** May be harmful if absorbed through skin. Causes skin irritation.  
**Eyes:** Causes eye irritation.  
**Ingestion:** May be harmful if swallowed.

**6. Sodium azide**

**Emergency Overview:**

**OSHA Hazards:** Target Organ Effect, Highly toxic by ingestion, Highly toxic by skin absorption

**Target Organs:** Heart, Central nervous system, Brain.

**GHS Classification:** Acute toxicity, Dermal (Category 1)

Acute toxicity, Oral (Category 2)

Acute aquatic toxicity (Category 1)

**GHS Label elements, including precautionary statements:**

**Pictogram:**



**Signal word:** Danger

**Hazard statement(s):**

**H300** Fatal if swallowed.

**H310** Fatal in contact with skin.

**H410** Very toxic to aquatic life with long lasting effects.

**Precautionary statement(s):**

**P262** Do not get in eyes, on skin, or on clothing.

**P264** Wash skin thoroughly after handling.

**P270** Do not eat, drink or smoke when using this product.

**P273** Avoid release to the environment.

**P280** Wear protective gloves/ protective clothing.

**P302+P350** IF ON SKIN: Gently wash with plenty of soap and water.

**P310** Immediately call a POISON CENTER or doctor/ physician.

**Potential Acute Health Effects:**

**Eye Contact:** May cause eye irritation.

**Skin Contact:** May be fatal if absorbed through skin. May cause skin irritation.

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion:** May be harmful if swallowed.

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** Not available.

**Mutagenic Effects:** Not available.

**Reproduction Toxicity:** Not available.

**Sensitization:** Not available.

**HMIS Code:** (Health: 4) (Flammability: 0) (Reactivity: 0)

**NFPA Code:** (Health: 4) (Flammability: 0) (Reactivity: 0)

**7. Methanol**

**Emergency Overview:**

**OSHA Hazards:**

**Target Organs:**

**GHS Classification:** Flammable liquids (Category 2), H225  
 Acute toxicity, Oral (Category 3), H301  
 Acute toxicity, Inhalation (Category 3), H331  
 Acute toxicity, Dermal (Category 3), H311  
 Specific target organ toxicity - single exposure (Category 1), H370

**GHS Label elements, including precautionary statements:**

**Pictogram:**



**Signal word:** Danger

**Hazard statement(s):**  
**H225** Highly flammable liquid and vapour  
**H301 + H311 + H331** Toxic if swallowed, in contact with skin or if inhaled.  
**H370** Causes damage to organs

**Precautionary statement(s):**

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
**P280** Wear protective gloves/ protective clothing  
**P302 + P352 + P312** IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell.  
**P304 + P340 + P311** IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor.  
**P370 + P378** In case of fire: Use dry powder or dry sand to extinguish.  
**P403 + P235** Store in a well-ventilated place. Keep cool.

**Potential Acute Health Effects:**

**Eye Contact:** Not available.  
**Skin Contact:** Not available.  
**Inhalation:** Not available.  
**Ingestion:** Not available.

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** Not available.  
**Mutagenic Effects:** Not available.  
**Reproduction Toxicity:** Not available.  
**Sensitization:** Not available.

**HMIS Code:** Not available.

**NFPA Code:** Not available.

## SECTION 4: FIRST AID MEASURES

**1. Sodium dodecyl sulfate**

**General information:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area  
**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician  
**Skin Contact:** Wash off with soap and plenty of water. Consult a physician.  
**Inhalation:** If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.  
**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.



<b>2. Lithium chloride</b>	
<b>General information:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance.
<b>Eye Contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician
<b>Skin Contact:</b>	Wash off with soap and plenty of water. Consult a physician.
<b>Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
<b>3. Tetramethylammonium chloride</b>	
<b>General information:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance
<b>Eye Contact:</b>	Flush eyes with water as a precaution
<b>Skin Contact:</b>	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician
<b>Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician
<b>4. Sodium N - lauroylsarcosinate</b>	
<b>General information:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance
<b>Eye Contact:</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin Contact:</b>	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician
<b>Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician
<b>5. Proteinase K</b>	
<b>General information:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>Eye Contact:</b>	Flush eyes with water as a precaution.
<b>Skin Contact:</b>	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
<b>Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
<b>6. Sodium azide</b>	
<b>General information:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>Eye Contact:</b>	Flush eyes with water as a precaution.
<b>Skin Contact:</b>	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
<b>Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician
<b>Ingestion:</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.



<b>7. Methanol</b>	
<b>General information:</b>	Consult a physician. Show this safety data sheet to the doctor in attendance
<b>Eye Contact:</b>	Flush eyes with water as a precaution.
<b>Skin Contact:</b>	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
<b>Inhalation:</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Ingestion:</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## SECTION 5: FIRE AND EXPLOSION DATA

<b>1. Sodium dodecyl sulfate</b>	
<b>Conditions of flammability:</b>	Not flammable or combustible.
<b>Suitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
<b>Special protective equipment for fire-fighters:</b>	Wear self contained breathing apparatus for fire fighting if necessary.
<b>Further information</b>	Use water spray to cool unopened containers.
<b>2. Lithium chloride</b>	
<b>Conditions of flammability:</b>	Not flammable or combustible.
<b>Suitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special protective equipment for fire-fighters:</b>	Wear self-contained breathing apparatus for firefighting if necessary.
<b>Hazardous combustion products:</b>	No data available
<b>3. Tetramethylammonium chloride</b>	
<b>Conditions of flammability:</b>	Not flammable or combustible.
<b>Suitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special protective equipment for fire-fighters:</b>	Wear self-contained breathing apparatus for firefighting if necessary
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
<b>4. Sodium N-lauroylsarcosinate</b>	
<b>Conditions of flammability:</b>	Not flammable or combustible.
<b>Suitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special protective equipment for fire-fighters:</b>	Wear self contained breathing apparatus for fire fighting if necessary.
<b>Further information</b>	No data available
<b>5. Proteinase K</b>	
<b>Conditions of flammability:</b>	Not flammable or combustible.
<b>Suitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special protective equipment for fire-fighters:</b>	Wear self-contained breathing apparatus for firefighting if necessary.
<b>Hazardous combustion products:</b>	Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known. Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.
<b>Hazardous combustion products:</b>	Hazardous decomposition products formed under fire conditions. - Sodium oxides.
<b>6. Sodium azide</b>	
<b>Conditions of flammability:</b>	Not flammable or combustible.



<b>Suitable extinguishing media:</b>	Dry powder.
<b>Special protective equipment for fire-fighters:</b>	Wear self-contained breathing apparatus for firefighting if necessary.
<b>7. Methanol</b>	
<b>Conditions of flammability:</b>	Not flammable or combustible.
<b>Suitable extinguishing media:</b>	Dry powder Dry sand. Do NOT use water jet.
<b>Special protective equipment for fire-fighters:</b>	Wear self-contained breathing apparatus for firefighting if necessary.
<b>Hazardous combustion products:</b>	No data available

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 1. Sodium dodecyl sulfate

<b>Personal Precautions:</b>	Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.
<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains
<b>Methods for Cleaning Up:</b>	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

### 2. Lithium chloride

<b>Personal Precautions:</b>	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
<b>Environmental precautions:</b>	Do not let product enter drains.
<b>Methods for Cleaning Up:</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 3. Tetramethylammonium chloride

<b>Personal Precautions:</b>	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.
<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
<b>Methods for Cleaning Up:</b>	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 4. Sodium N-lauroylsarcosinate

<b>Personal Precautions:</b>	Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
<b>Methods for Cleaning Up:</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 5. Proteinase K

<b>Personal Precautions:</b>	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
<b>Environmental precautions:</b>	Do not let product enter drains.
<b>Methods for Cleaning Up:</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

<b>6. Sodium azide</b>	
<b>Personal Precautions:</b>	Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
<b>Methods for Cleaning Up:</b>	Take up mechanically and collect in suitable container for disposal.
<b>7. Methanol</b>	
<b>Personal Precautions:</b>	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
<b>Methods for Cleaning Up:</b>	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national

## SECTION 7: HANDLING AND STORAGE

<b>1. Sodium dodecyl sulfate</b>	
<b>Precautions:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Hygroscopic.
<b>2. Lithium chloride</b>	
<b>Precautions:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2
<b>Storage:</b>	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. hygroscopic
<b>3. Tetramethylammonium chloride</b>	
<b>Precautions:</b>	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.
<b>Storage:</b>	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects
<b>4. Sodium N-lauroylsarcosinate</b>	
<b>Precautions:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Ensure all equipment is electrically grounded before beginning transfer operations. Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
<b>Storage:</b>	Store in cool place. Keep container tightly closed in a dry and well-ventilated place
<b>5. Proteinase K</b>	
<b>Precautions:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place. Keep in a dry place.



<b>6. Sodium azide</b>	
<b>Precautions:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Do not store near acids. Heat sensitive.
<b>7. Methanol</b>	
<b>Precautions:</b>	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge
<b>Storage:</b>	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a cool, well-ventilated place.

### SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>1. Sodium dodecyl sulfate</b>	
Contains no substances with occupational exposure limit values.	
<b>Personal protective equipment:</b>	
<b>Respiratory protection:</b>	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hand protection:</b>	Handle with gloves
<b>Eye protection:</b>	Face shield and safety glasses
<b>Skin and body protection:</b>	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
<b>Hygiene measures:</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>2. Lithium chloride</b>	
Components with workplace control parameters	
<b>Personal protective equipment:</b>	
<b>Respiratory protection:</b>	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hand protection:</b>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>Eye protection:</b>	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).



<b>Skin and body protection:</b>	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Control of environmental exposure</b>	Do not let product enter drains
<b>3. Tetramethylammonium chloride</b>	
Components with workplace control parameters	
<b>Personal protective equipment:</b>	
<b>Respiratory protection:</b>	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hand protection:</b>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to s
<b>Eye protection:</b>	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
<b>Skin and body protection:</b>	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace
<b>Control of environmental exposure</b>	Do not let product enter drains
<b>4. Sodium N-lauroylsarcosinate</b>	
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.	
<b>Personal protective equipment:</b>	
<b>Respiratory protection:</b>	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hand protection:</b>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>Eye protection:</b>	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
<b>Skin and body protection:</b>	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Control of environmental exposure</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**5. Proteinase K**

Contains no substances with occupational exposure limit values.

**Personal protective equipment:**

**Respiratory protection:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection:** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**6. Sodium azide**

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Follow usual standard laboratory practices. Use appropriate chemical resistant gloves, appropriate safety glasses and wear protective work clothing.

**Exposure Limits:** Not available.

**7. Methanol**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment:**

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Eye protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection:** Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Control of environmental exposure** Prevent further leakage or spillage if safe to do so. Do not let product enter drains

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
<b>1. Sodium dodecyl sulfate</b>			
<b>Physical State and Appearance:</b>	solid	<b>Vapor Pressure:</b>	Not available.
<b>Odor:</b>	Not available.	<b>Vapor Density:</b>	Not available.
<b>Taste:</b>	Not available.	<b>Volatility:</b>	Not available.
<b>Molecular Weight:</b>	Not available.	<b>Odor Threshold:</b>	Not available.
<b>pH (1% soln/water):</b>	7.2	<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Boiling Point:</b>	Not available.	<b>Ionicity (in Water):</b>	Not available.
<b>Melting Point:</b>	204 - 207 °C	<b>Dispersion Properties:</b>	Not available.
<b>Critical Temperature:</b>	Not available.	<b>Solubility:</b>	Water soluble
<b>Specific Gravity:</b>	0.370 g/cm <sup>3</sup>		
<b>2. Lithium chloride</b>			
<b>Physical State and Appearance:</b>	White crystalline.	<b>Vapor Pressure:</b>	Not available.
<b>Odor:</b>	Not available.	<b>Vapor Density:</b>	Not available.
<b>Taste:</b>	Not available.	<b>Volatility:</b>	Not available.
<b>Molecular Weight:</b>	Not available.	<b>Odor Threshold:</b>	Not available.
<b>pH (1% soln/water):</b>	6	<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Boiling Point:</b>	1.360 °C	<b>Ionicity (in Water):</b>	Not available.
<b>Melting Point:</b>	605 °C	<b>Dispersion Properties:</b>	Not available.
<b>Critical Temperature:</b>	Not available.	<b>Solubility:</b>	Not available.
<b>Specific Gravity:</b>	2,070 g/cm <sup>3</sup>		
<b>3. Tetramethylammonium chloride</b>			
<b>Physical State and Appearance:</b>	liquid	<b>Vapor Pressure:</b>	Not available.
<b>Odor:</b>	Not available.	<b>Vapor Density:</b>	Not available.
<b>Taste:</b>	Not available.	<b>Volatility:</b>	Not available.
<b>Molecular Weight:</b>	Not available.	<b>Odor Threshold:</b>	Not available.
<b>pH (1% soln/water):</b>	Not available.	<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Boiling Point:</b>	Not available.	<b>Ionicity (in Water):</b>	Not available.
<b>Melting Point:</b>	Not available.	<b>Dispersion Properties:</b>	Not available.
<b>Critical Temperature:</b>	Not available.	<b>Solubility:</b>	Not available.
<b>Specific Gravity:</b>	Not available.		
<b>4. Sodium N-lauroylsarcosinate</b>			
<b>Physical State and Appearance:</b>	White powder	<b>Vapor Pressure:</b>	0,02 hPa at 20 °C
<b>Odor:</b>	Not available.	<b>Vapor Density:</b>	Not available.
<b>Taste:</b>	Not available.	<b>Volatility:</b>	Not available.
<b>Molecular Weight:</b>	Not available.	<b>Odor Threshold:</b>	Not available.
<b>pH (1% soln/water):</b>	7,0 - 9 at 293 g/l at 25 °C	<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Boiling Point:</b>	350 - 410 °C at 1.013 hPa	<b>Ionicity (in Water):</b>	Not available.
<b>Melting Point:</b>	146,1 °C at 1.013 hPa	<b>Dispersion Properties:</b>	Not available.
<b>Critical Temperature:</b>	267 °C - closed cup	<b>Solubility:</b>	293 g/l at 20 °C - completely soluble
<b>Relative density:</b>	1.141 g/cm <sup>3</sup> at 20 °C		

<b>5. Proteinase K</b>			
<b>Physical State and Appearance:</b>	Liquid	<b>Vapor Pressure:</b>	Not available.
<b>Odor:</b>	Not available.	<b>Vapor Density:</b>	Not available.
<b>Taste:</b>	Not available.	<b>Volatility:</b>	Not available.
<b>Molecular Weight:</b>	Not available.	<b>Odor Threshold:</b>	Not available.
<b>pH (1% soln/water):</b>	Not available.	<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Boiling Point:</b>	Not available.	<b>Ionicity (in Water):</b>	Not available.
<b>Melting Point:</b>	Not available.	<b>Dispersion Properties:</b>	Not available.
<b>Critical Temperature:</b>	Not available.	<b>Solubility:</b>	Not available.
<b>Specific Gravity:</b>	Not available.		
<b>6. Sodium azide</b>			
<b>Physical State and Appearance:</b>	Liquid.	<b>Vapor Pressure:</b>	Not available.
<b>Odor:</b>	Not available.	<b>Vapor Density:</b>	Not available.
<b>Taste:</b>	Not available.	<b>Volatility:</b>	Not available.
<b>pH (1% soln/water):</b>	Not available.	<b>Odor Threshold:</b>	Not available.
<b>Boiling Point:</b>	Not available.	<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Melting Point:</b>	Not available.	<b>Ionicity (in Water):</b>	Not available.
<b>Critical Temperature:</b>	Not available.	<b>Dispersion Properties:</b>	Not available.
<b>Specific Gravity:</b>	Not available.	<b>Solubility:</b>	Not available.
<b>7. Methanol</b>			
<b>Physical State and Appearance:</b>	Colorless Liquid.	<b>Vapor Pressure:</b>	130,3 hPa at 20,0 °C
<b>Odor:</b>	Pungent		546,6 hPa at 50,0 °C
<b>Taste:</b>	Not available.		169,27 hPa at 25,0 °C
<b>pH (1% soln/water):</b>	Not available.	<b>Vapor Density:</b>	°C
<b>Boiling Point:</b>	64,7 °C	<b>Volatility:</b>	1.11
<b>Melting Point:</b>	-98 °C	<b>Odor Threshold:</b>	Not available.
<b>Critical Temperature:</b>	9.7 °C - closed cup	<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Specific Gravity:</b>	0.791 g/mL at 25 °C	<b>Ionicity (in Water):</b>	Not available.
		<b>Dispersion Properties:</b>	Not available.
		<b>Water Solubility:</b>	Not available. completely miscible

## SECTION 10: STABILITY AND REACTIVITY DATA

<b>1. Sodium dodecyl sulfate</b>	
<b>Stability:</b>	Stable under recommended storage conditions
<b>Reactivity:</b>	Not available.
<b>Conditions to Avoid:</b>	Heat, flames and sparks.
<b>Materials to Avoid:</b>	Oxidizing agents
<b>Hazardous Decomposition Products:</b>	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides
<b>Possibility of hazardous reactions:</b>	Not available.
<b>2. Lithium chloride</b>	
<b>Stability:</b>	Stable under recommended storage conditions
<b>Reactivity:</b>	Not available.
<b>Conditions to Avoid:</b>	Exposure to moisture
<b>Materials to Avoid:</b>	Strong acids, Strong oxidizing agents, Bromine trifluoride
<b>Hazardous Decomposition Products:</b>	



<b>Possibility of hazardous reactions:</b>	Other decomposition products - No data available Hazardous decomposition products formed under fire conditions. - Hydrogen chloride gas, Lithium oxides In the event of fire: see section 5 Not available.
<b>3. Tetramethylammonium chloride</b>	
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Reactivity:</b>	Not available.
<b>Conditions to Avoid:</b>	No data available
<b>Materials to Avoid:</b>	Strong bases, Strong oxidizing agents
<b>Hazardous Decomposition Products:</b>	Other decomposition products - No data available In the event of fire: see section 5 Not available.
<b>Possibility of hazardous reactions:</b>	No data available
<b>4. Sodium N-lauroylsarcosinate</b>	
<b>Stability:</b>	Stable under recommended storage conditions. no data available
<b>Reactivity:</b>	Not available.
<b>Conditions to Avoid:</b>	no data available
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products:</b>	Other decomposition products - no data available
<b>Possibility of hazardous reactions:</b>	no data available
<b>5. Proteinase K</b>	
<b>Stability:</b>	The product is stable under recommended shipping and storage conditions.
<b>Reactivity:</b>	The product is stable under recommended shipping and storage conditions.
<b>Conditions to Avoid:</b>	Not available.
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products:</b>	Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known. Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known. Other decomposition products - no data available
<b>Possibility of hazardous reactions:</b>	Not available.
<b>6. Sodium azide</b>	
<b>Stability:</b>	The product is stable under recommended shipping and storage conditions.
<b>Reactivity:</b>	The product is stable under recommended shipping and storage conditions.
<b>Conditions to Avoid:</b>	Excess heat and moisture.
<b>Materials to Avoid:</b>	Strong acids/alkalis, strong oxidizing/reducing agents.
<b>Hazardous Decomposition Products:</b>	Not available.
<b>Polymerization:</b>	Will not occur.
<b>7. Methanol</b>	
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Reactivity:</b>	No data available
<b>Conditions to Avoid:</b>	Heat, flames and sparks
<b>Materials to Avoid:</b>	Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids
<b>Hazardous Decomposition Products:</b>	Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available

**SECTION 11: TOXICOLOGICAL INFORMATION**



**1. Sodium dodecyl sulfate**

**Potential Acute Health Effects:**

**Eye Contact:** Eyes - rabbit - Eye irritation  
**Skin Contact:** Skin - rabbit - Skin irritation - 24 h  
**Inhalation:** Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.  
**Ingestion:** LD50 Oral - rat - 1,288 mg/kg  
 LC50 Inhalation - rat - 1 h - > 3,900 mg/m3  
 LD50 Dermal - rabbit - 580 mg/kg

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
 ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Mutagenic Effects:** Not available.  
**Reproduction Toxicity:** Not available.  
**Sensitization:** Not available.

**Specific target organ toxicity - single exposure (Globally Harmonized System):**

Inhalation May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System):**

Not available.

**Aspiration hazard:**

Not available.

**Potential health effects:**

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.  
**Ingestion:** May be harmful if swallowed.  
**Skin:** Toxic if absorbed through skin. Causes skin irritation.  
**Eyes:** Causes eye irritation.

**Signs and Symptoms of Exposure:**

The sodium salt of dodecyl sulfate has been reported to cause pulmonary sensitization resulting in hyperactive airway dysfunction and pulmonary allergy accompanied by fatigue, malaise, and aching. Significant symptoms of exposure can persist for more than two years and can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes, and passive smoking.

**Synergistic effects:**

Not available.

**Additional Information:**

RTECS: WT1050000

**2. Lithium chloride**

**Potential Acute Health Effects:**

**Eye Contact:** Eyes - Rabbit Result: Eye irritation (OECD Test Guideline 405)  
**Skin Contact:** Skin - Rabbit Result: Skin irritation (OECD Test Guideline 404)  
**Inhalation:** No data available  
**Ingestion:** LD50 Oral - Rat - 526 mg/kg

**Potential Chronic Health Effects:**



**Carcinogenic Effects:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Mutagenic Effects:** Not available.

**Reproduction Toxicity:** Not available.

**Sensitization:** Not available.

**Specific target organ toxicity - single exposure (Globally Harmonized System):**

May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System):**

Not available.

**Aspiration hazard:**

Not available.

**Potential health effects:**

**Inhalation:** Not available.

**Ingestion:** Not available.

**Skin:** Not available.

**Eyes:** Not available.

**Signs and Symptoms of Exposure:** Not available.

**Synergistic effects:** Not available.

**Additional Information:** RTECS: OJ5950000

**3. Tetramethylammonium chloride**

**Potential Acute Health Effects:**

**Eye Contact:** No data available

**Skin Contact:** No data available

**Inhalation:** No data available

**Ingestion:** No data available

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Mutagenic Effects:** Not available.

**Reproduction Toxicity:** Not available.

**Sensitization:** Not available.

**Specific target organ toxicity - single exposure (Globally Harmonized System):**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System):**

Not available.

**Aspiration hazard:**

Not available.

**Potential health effects:**

**Inhalation:** Not available.

**Ingestion:** Not available.

**Skin:** Not available.

**Eyes:** Not available.

**Signs and Symptoms of Exposure:** Not available.

**Synergistic effects:** Not available.

**Additional Information:** No data available

**4. Sodium N-lauroylsarcosinate**

**Potential Acute Health Effects:**

**Eye Contact:** Risk of serious damage to eyes  
**Skin Contact:** Irritating to skin  
**Inhalation:** May cause sensitization by inhalation.  
**Acute toxicity** LD50 Oral - rat - male and female - > 5.000 mg/kg (OECD Test Guideline 401)  
 LC50 Inhalation - rat - 4 h - 0,05 - 0,5 mg/l

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
**Mutagenic Effects:** Not available.  
**Reproduction Toxicity:** Not available.  
**Sensitization:** Does not cause skin sensitisation

**Specific target organ toxicity - single exposure (Globally Harmonized System):**

Not available.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System):**

Not available.

**Aspiration hazard:**

Not available.

**Potential health effects:**

**Inhalation:** Not available.  
**Ingestion:** Not available.  
**Skin:** Not available.  
**Eyes:** Not available.

**Signs and Symptoms of Exposure:**

Not available.

**Synergistic effects:**

Not available.

**Additional Information:**

RTECS: Not available

**5. Proteinase K**

**Potential Acute Health Effects:**

**Eye Contact:** Not available.  
**Skin Contact:** Not available.  
**Inhalation:** May cause sensitization by inhalation.  
**Ingestion:** Not available.

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
 ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.  
**Mutagenic Effects:** Not available.  
**Reproduction Toxicity:** Not available.  
**Sensitization:** Not available.

**Specific target organ toxicity - single exposure (Globally Harmonized System):**

May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System):**



Aspiration hazard: Not available.  
 Potential health effects: Not available.  
     **Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.  
     **Ingestion:** May be harmful if swallowed.  
     **Skin:** May be harmful if absorbed through skin. Causes skin irritation.  
     **Eyes:** Causes eye irritation.  
**Signs and Symptoms of Exposure:** prolonged or repeated exposure can cause:, Asthma  
**Synergistic effects:** Not available.  
**Additional Information:** RTECS: Not available

**6. Sodium azide**

**Acute toxicity:**  
     Oral LD50 LD50 Oral - rat - 27 mg/kg  
     Inhalation C50 LC50 Inhalation - rat - 37 mg/m3  
     Remarks Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye: Other. Behavioral: Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration: Structural or functional change in trachea or bronchi.  
     Dermal LD50 LD50 Dermal - rabbit - 20 mg/kg  
 Other information on acute toxicity Not available.

**Potential Acute Health Effects:**

**Eye Contact:** May cause eye irritation.  
     **Skin Contact:** May cause skin irritation.  
     **Inhalation:** May cause irritation of respiratory tract.  
     **Ingestion:** May be harmful if swallowed.

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** Not available.  
     **Mutagenic Effects:** Not available.  
     **Reproduction Toxicity:** Not available.  
     **Sensitization:** Not available.

**Additional Information:** RTECS: VY8050000

**7. Methanol**

**Acute toxicity:**  
     Oral LD50 LDLO Oral - Human - 143 mg/kg  
     LD50 Oral - Rat - 1187 - 2769 mg/kg  
     LD50 Dermal - Rabbit - 17100 mg/kg  
     Remarks Lungs, Thorax, or Respiration:Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.  
     Inhalation LC50 LC50 Inhalation - Rat - 4 h – 128.2 mg/l  
     LC50 Inhalation - Rat - 6 h – 87.6 mg/l  
     Dermal LD50 LD50 Dermal - rabbit - 20 mg/kg  
 Other information on acute toxicity Not available.

**Potential Acute Health Effects:**

**Eye Contact:** Eyes - Rabbit Result: No eye irritation  
     **Skin Contact:** Skin - Rabbit Result: No skin irritation  
     **Inhalation:** Maximisation Test - Guinea pig Does not cause skin sensitisation  
     **Ingestion:** May be harmful if swallowed.

**Potential Chronic Health Effects:**

**Carcinogenic Effects:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.



<b>Mutagenic Effects:</b>	Not available.
<b>Reproduction Toxicity:</b>	Damage to fetus not classifiable Fertility classification not possible from current data.
<b>Sensitization:</b>	Not available.
<b>Additional Information:</b>	RTECS: PC1400000

## SECTION 12: ECOLOGICAL INFORMATION

### 1. Sodium dodecyl sulfate

<b>Toxicity:</b>	Toxicity to fish: mortality NOEC - <i>Oncorhynchus mykiss</i> (rainbow trout) - 19.5 mg/l - 96 h mortality LOEC - <i>Pimephales promelas</i> (fathead minnow) - 4.6 mg/l - 8 d LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - 3.6 mg/l - 96 h Toxicity to algae : Growth inhibition LOEC - <i>Pseudokirchneriella subcapitata</i> - 2.68 mg/l - 6 d
<b>Persistence and degradability:</b>	Not available.
<b>Bioaccumulative potential:</b>	<i>Cyprinus carpio</i> (Carp) - 72 h Bioconcentration factor (BCF): 3.9 - 5.3
<b>Mobility in soil:</b>	Not available.
<b>PBT and vPvB assessment:</b>	Not available.
<b>Other adverse effects:</b>	Not available.

### 2. Lithium chloride

<b>Toxicity:</b>	Not available.
<b>Persistence and degradability:</b>	Not available.
<b>Bioaccumulative potential:</b>	Not available.
<b>Mobility in soil:</b>	Not available.
<b>PBT and vPvB assessment:</b>	Not available.
<b>Other adverse effects:</b>	Not available.

### 3. Tetramethylammonium chloride

<b>Toxicity:</b>	Not available.
<b>Persistence and degradability:</b>	Not available.
<b>Bioaccumulative potential:</b>	Not available.
<b>Mobility in soil:</b>	Not available.
<b>PBT and vPvB assessment:</b>	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
<b>Other adverse effects:</b>	Toxic to aquatic life with long lasting effects

<b>4. Sodium N-lauroylsarcosinate</b>	
<b>Toxicity:</b>	<p>Toxicity to fish: semi-static test EC50 - Danio rerio (zebra fish) - 107 mg/l - 96 h (OECD Test Guideline 203)</p> <p>Toxicity to daphnia and other aquatic invertebrates: Immobilization LC50 - Daphnia magna (Water flea) - 29,7 mg/l - 48 h (OECD Test Guideline 202)</p> <p>Toxicity to algae static test EC50: Desmodesmus subspicatus (green algae) - 79 mg/l - 72 h (OECD Test Guideline 201)</p> <p>Toxicity to bacteria Respiration inhibition NOEC: Sludge Treatment - 100 mg/l - 3 h (OECD Test Guideline 209)</p>
<b>Persistence and degradability:</b>	Biodegradability aerobic: Exposure time 28 d Result: 82 % - Readily biodegradable.
<b>Bioaccumulative potential:</b>	Not available.
<b>Mobility in soil:</b>	Not available.
<b>PBT and vPvB assessment:</b>	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>Other adverse effects:</b>	no data available

<b>5. Proteinase K</b>	
<b>Exotoxicity Effects:</b>	Undetermined.
<b>Mobility:</b>	Undetermined.
<b>Biodegradation:</b>	Undetermined.
<b>6. Sodium azide</b>	
<b>Toxicity:</b>	<p>Toxicity to fish LC50 - Lepomis macrochirus - 0.68 mg/l - 96.0 h</p> <p>Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia pulex (Water flea) - 4.2 mg/l - 48 h</p>
<b>Persistence and degradability:</b>	Not available.
<b>Bioaccumulative potential:</b>	Not available.
<b>Mobility in soil:</b>	Not available.
<b>PBT and vPvB assessment:</b>	Not available.
<b>Other adverse effects:</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life.

<b>7. Methanol</b>	
<b>Toxicity:</b>	<p>Toxicity to fish mortality LC50 - Lepomis macrochirus (Bluegill) - 15400 mg/l - 96 h NOEC - Oryzias latipes - 7900 mg/l - 200 h</p> <p>Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia magna (Water flea) - &gt; 10000 mg/l - 48 h</p> <p>Toxicity to algae Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 22000 mg/l - 96 h</p>
<b>Persistence and degradability:</b>	Biodegradability aerobic - Exposure time 5 d Result: 72 % - rapidly biodegradable Biochemical Oxygen Demand (BOD) 600 - 1.120 mg/g Chemical Oxygen Demand (COD) 1.420 mg/g Theoretical oxygen demand 1.500 mg/g
<b>Bioaccumulative potential:</b>	Bioaccumulation Cyprinus carpio (Carp) - 72 d at 20 °C - 5 mg/l Bioconcentration factor (BCF): 1,0
<b>Mobility in soil:</b>	Will not adsorb on soil.



<b>PBT and vPvB assessment:</b>	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
<b>Other adverse effects:</b>	Additional ecological information Avoid release to the environment. Stability in water at 19 °C 83 - 91 % - 72 h Remarks: Hydrolyses on contact with water. Hydrolyses readily.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Product:**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging:**

Dispose of as unused product.

### SECTION 14: TRANSPORT INFORMATION

**1. Sodium dodecyl sulfate**

**DOT (US):**

UN-Number: 2926 Class: 4.1 (6.1) Packing group: II  
Proper shipping name: Flammable solids, toxic, organic, n.o.s. (Sodium dodecyl sulphate) Marine pollutant: No Poison  
Inhalation Hazard: No

**IMDG:**

UN-Number: 2926 Class: 4.1 (6.1) Packing group: II EMS-No: F-A, S-G  
Proper shipping name: FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Sodium dodecyl sulphate) Marine pollutant: No

**IATA:**

UN-Number: 2926 Class: 4.1 (6.1) Packing group: II  
Proper shipping name: Flammable solid, toxic, organic, n.o.s. (Sodium dodecyl sulphate)

**2. Lithium chloride**

**DOT (US):**

Not dangerous goods

**IMDG:**

Not dangerous goods

**IATA:**

Not dangerous goods

**3. Tetramethylammonium chloride**

**DOT (US):**

UN number: 2810 Class: 6.1 Packing group: III  
ADR/RID: TOXIC LIQUID, ORGANIC, N.O.S.  
(Tetramethylammonium chloride)

**IMDG:**

UN number: 2810 Class: 6.1 Packing group: III  
IMDG: TOXIC LIQUID, ORGANIC, N.O.S.  
(Tetramethylammonium chloride)

**IATA:**

UN number: 2810 Class: 6.1 Packing group: III



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IATA: Toxic liquid, organic, n.o.s.  
(Tetramethylammonium chloride)

#### 4. Sodium N-lauroylsarcosinate

**DOT (US):**

UN number: 2811 Class: 6.1 Packing group: II  
TOXIC SOLID, ORGANIC, N.O.S. (Sodium N-lauroylsarcosinate)

**IMDG:**

UN number: 2811 Class: 6.1 Packing group: II  
TOXIC SOLID, ORGANIC, N.O.S. (Sodium N-lauroylsarcosinate)

**IATA:**

UN number: 2811 Class: 6.1 Packing group: II  
Toxic solid, organic, n.o.s. (Sodium N-lauroylsarcosinate)

#### 5. Proteinase K

**DOT(US):** Not dangerous goods.

**IMDG:** Not dangerous goods.

**IATA:** Not dangerous goods.

#### 6. Sodium azide

**DOT (US):**

UN number: 1687 Class: 6.1 Packing group: II  
Proper shipping name: Sodium azide  
Reportable Quantity (RQ): 1000 lbs  
Marine pollutant: No Poison Inhalation  
Hazard: No

**IMDG:**

UN number: 1687 Class: 6.1 Packing group: II EMS-No: F-A, S-A  
Proper shipping name: SODIUM AZIDE  
Marine pollutant: No

**IATA:**

UN number: 1687 Class: 6.1 Packing group: II  
Proper shipping name: Sodium azide

#### 7. Methanol

**DOT (US):**

UN number: 1230 Class: 6.1 Packing group: II  
Proper shipping name: METHANOL

**IMDG:**

UN number: 1230 Class: 6.1 Packing group: II  
Proper shipping name: METHANOL

**IATA:**

UN number: 1230 Class: 6.1 Packing group: II  
Proper shipping name: Methanol

### SECTION 15: OTHER REGULATORY INFORMATION

#### 1. Sodium dodecyl sulfate

**OSHA Hazards**



Flammable solid, Target Organ Effect, Harmful by ingestion., Toxic by skin absorption, Irritant

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards** Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components** No Components Listed.

**Pennsylvania Right To Know Components**

Sodium dodecyl sulphate CAS-No. 151-21-3

**New Jersey Right To Know Components**

Sodium dodecyl sulphate CAS-No. 151-21-3

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**2. Lithium chloride**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**3. Tetramethylammonium chloride**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**4. Sodium N-lauroylsarcosinate**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Chemical safety assessment**

For this product a chemical safety assessment was not carried out

**5. Proteinase K**

**OSHA Hazards**

Target Organ Effect, Respiratory sensitiser, Irritant

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards** Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components** No Components Listed.

**Pennsylvania Right To Know Components**



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### **New Jersey Right To Know Components**

Proteinase K CAS-No. 39450-01-6

### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **6. Sodium azide**

### **OSHA Hazards**

Target Organ Effect, Highly toxic by ingestion, Highly toxic by skin absorption

### **SARA 302 Components**

Sodium azide CAS-No. 26628-22-8

### **SARA 313 Components**

Sodium azide CAS-No. 26628-22-8

### **SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

### **Massachusetts Right To Know Components**

Sodium azide CAS-No. 26628-22-8

### **Pennsylvania Right To Know Components**

Sodium azide CAS-No. 26628-22-8

### **New Jersey Right To Know Components**

Sodium azide CAS-No. 26628-22-8

### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **7. Tetramethylammonium chloride**

### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### **Chemical safety assessment**

A Chemical Safety Assessment has been carried out for this substance.

## **SECTION 16: OTHER INFORMATION**

To the best of our knowledge, the information contained herein is accurate and complete. However, we can neither guarantee or assume any liability whatsoever for the accuracy or completeness of the information contained in this MSDS. Final determination of suitability of any material is the sole responsibility of the user, as health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. All materials and mixtures may present unknown hazards and should be used with caution. No warranty is made, either express or implied.