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A Geno Technology, Inc. (USA) brand name

# Safety Data Sheet

## CHAPS (3-(3-Cholamidopropyl)dimethyl ammonio)-1-propanesulfonate)

Cat. # DG049



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# 3((3-cholamidopropyl)dimethylammonio)1-propanesulfonate, dihydrate

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of issue: 12/9/2015 Revision date: 1/17/2025 Supersedes: 1/14/2025 Version: 10.0

### SECTION 1 Identification

#### 1.1. Product identifier

Product form : Substance  
Substance name : 3((3-cholamidopropyl)dimethylammonio)1-propanesulfonate, dihydrate  
Chemical name : CHAPS  
CAS-No. : 75621-03-3  
Product code : 163C  
Formula : C32H58N2O7S  
BIG No : 19945

#### 1.2. Other means of identification

Synonyms : 1-propanaminium, N,N-dimethyl-3-sulfo-N-(3-(((3alpha,5beta,7alpha,12alpha)-3,7,12-trihydroxy-24-oxocholan-24-yl)amino)propyl)-,hydroxide,inner salt

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

#### 1.4. Supplier's details

G-Biosciences/ Geno Technology, Inc.  
9800 Page Avenue  
St. Louis, MO 63132-1429, USA  
Tel.1-800-628-7730  
[www.GBiosciences.com](http://www.GBiosciences.com)

#### 1.5. Emergency phone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

### SECTION 2 Hazard Identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

|   |      |                                   |
|---|------|-----------------------------------|
| Skin corrosion/irritation, Category 2   | H315 | Causes skin irritation.           |
| Serious eye damage/eye irritation, Category 2   | H319 | Causes serious eye irritation.    |
| Specific target organ toxicity – Single exposure, Category 3,<br>Respiratory tract irritation | H335 | May cause respiratory irritation. |

Full text of H statements : see section 16

#### 2.2. Label elements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning  
Hazard statements (GHS US) : H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation

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Precautionary statements (GHS US) : P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves.  
P302+P352 - If on skin: Wash with plenty of water.  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 - Call a poison center or doctor if you feel unwell.  
P321 - Specific treatment (see supplemental first aid instruction on this label).  
P332+P313 - If skin irritation occurs: Get medical advice or attention.  
P337+P313 - If eye irritation persists: Get medical advice or attention.  
P362+P364 - Take off contaminated clothing and wash it before reuse.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

### 2.4. Hazards not otherwise classified

No additional information available

### 2.5. Unknown acute toxicity

No additional information available

## SECTION 3 Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent

| Name  | Common Name (Synonyms)  | Product identifier  | %   | GHS US classification  |
|---|---|---------------------|-----|--|
| 3((3-cholamidopropyl)dimethylammonio)1-propanesulfonate,dihydrate<br>(Main constituent) | 1-propanaminium, N,N-dimethyl-3-sulfo-N-(3-(((3alpha,5beta,7alpha,12alpha)-3,7,12-trihydroxy-24-oxocholan-24-yl)amino)propyl)-,hydroxide,inner salt | CAS-No.: 75621-03-3 | 100 | Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335 |

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

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### SECTION 4 First aid measures

#### 4.1. Description of necessary first-aid measures

|                                       |   |
|---------------------------------------|---|
| First-aid measures general            | : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a poison center/doctor/physician if you feel unwell. |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. 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. Call a poison center/doctor/physician if you feel unwell.  |
| First-aid measures after skin contact | : Wash immediately with lots of water. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.   |
| First-aid measures after eye contact  | : Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  |
| First-aid measures after ingestion    | : Rinse mouth with water. Call Poison Information Centre ( <a href="http://www.big.be/antigif.html">www.big.be/antigif.html</a> ). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell.  |
| Self protection of the first-aiders   | : First aid workers will be equipped with suitable personal protective equipment.   |

#### 4.2. Most important symptoms/effects, acute and delayed

|   |  |
|---|--|
| Potential Adverse human health effects and symptoms | : Causes skin irritation. May cause respiratory irritation. Causes serious eye irritation.   |
| Symptoms/effects after inhalation                   | : Irritation of the respiratory tract. Irritation of the nasal mucous membranes. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. May cause respiratory irritation. |
| Symptoms/effects after skin contact                 | : Tingling/irritation of the skin. Causes skin irritation. Irritation.   |
| Symptoms/effects after eye contact                  | : Irritation of the eye tissue. Eye irritation.  |
| Symptoms/effects after ingestion                    | : None under normal conditions.  |

#### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

|                                   |                          |
|-----------------------------------|--------------------------|
| Other medical advice or treatment | : Treat symptomatically. |
|-----------------------------------|--------------------------|

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

|                                |   |
|--------------------------------|---|
| Suitable extinguishing media   | : Water spray. Alcohol-resistant foam. Polymer foam. ABC powder. Carbon dioxide. Foam. Dry powder. Carbon dioxide. Water spray. Sand. |
| Unsuitable extinguishing media | : Quick-acting BC powder extinguisher. Quick-acting CO2 extinguisher.   |

#### 5.2. Specific hazards arising from the chemical

|                  |                               |
|------------------|-------------------------------|
| Fire hazard      | : No fire hazard.             |
| Explosion hazard | : No direct explosion hazard. |

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Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Dilute toxic gases with water spray.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6 Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

#### For non-emergency personnel

Protective equipment : Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034). Dust cloud production: self-contained breathing apparatus (EN 136 + EN 137). Dust cloud production: dust-tight suit (EN 13982).

Emergency procedures : Ventilate spillage area. Mark the danger area. Prevent dust cloud formation. No naked flames. Wash contaminated clothes. Evacuate unnecessary personnel. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.

#### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area. Evacuate unnecessary personnel.

Environmental precautions : Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.2. Methods and materials for containment and cleaning up

For containment : Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.

Methods for cleaning up : Mechanically recover the product. Stop dust cloud by covering with sand/earth. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

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### SECTION 7 Handling and storage

#### 7.1. Precautions for safe handling

|                                   |  |
|-----------------------------------|--|
| Precautions for safe handling     | : Ensure good ventilation of the work station. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Avoid raising dust. Keep away from naked flames/heat. Reduce/avoid exposure and/or contact. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment. |
| Hygiene measures                  | : Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.  |
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use.   |

#### 7.2. Conditions for safe storage, including incompatibilities

|                              |   |
|------------------------------|---|
| Technical measures           | : Keep in a cool, well-ventilated place away from heat.   |
| Storage conditions           | : Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed. Store locked up. Store in a well-ventilated place. |
| Storage area                 | : Store in a dry area. Meet the legal requirements.   |
| Incompatible products        | : Strong bases. Strong acids.   |
| Incompatible materials       | : Sources of ignition. Direct sunlight.   |
| Information on mixed storage | : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) acids. (strong) bases.   |
| Heat-ignition                | : KEEP SUBSTANCE AWAY FROM: heat sources.   |
| Special rules on packaging   | : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.  |
| Packaging materials          | : Store always product in container of same material as original container.   |

### SECTION 8 Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

|                                  |  |
|----------------------------------|--|
| Appropriate engineering controls | : Ensure good ventilation of the work station. |
| Environmental exposure controls  | : Avoid release to the environment.            |

#### 8.3. Individual protection measures, such as personal protective equipment

##### Personal protective equipment:

Avoid all unnecessary exposure.

|  |
|--|
| <b>Hand protection:</b>  |
| Gloves. Wear protective gloves.  |
| <b>Eye protection:</b>   |
| Face shield. In case of dust production: protective goggles. Chemical goggles or safety glasses. Safety glasses  |
| <b>Skin and body protection:</b>   |
| Protective clothing. In case of dust production: head/neck protection. In case of dust production: dustproof clothing. Wear suitable protective clothing |
| <b>Respiratory protection:</b>   |
| Dust production: dust mask with filter type P2. Wear appropriate mask  |

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### Personal protective equipment symbol(s):



### Other information:

Do not eat, drink or smoke during use.

## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

|   |                     |
|---|---------------------|
| Physical state                                  | : Solid             |
| Appearance                                      | : Solid.            |
| Color   | : Colorless         |
| Odor  | : characteristic    |
| Odor threshold                                  | : No data available |
| pH  | : No data available |
| Melting point                                   | : 157 °C            |
| Freezing point                                  | : Not applicable    |
| Boiling point                                   | : No data available |
| Flash point                                     | : Not applicable    |
| Flammability (solid, gas)                       | : Non flammable.    |
| Vapor pressure                                  | : No data available |
| Relative vapor density at 20°C                  | : Not applicable    |
| Relative density                                | : No data available |
| Molecular mass                                  | : 650.92 g/mol      |
| Solubility                                      | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature                       | : Not applicable    |
| Decomposition temperature                       | : 157 °C            |
| Viscosity, kinematic                            | : Not applicable    |
| Explosion limits                                | : Not applicable    |
| Particle characteristics                        | : No data available |

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

VOC content : 0 %

## SECTION 10 Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions. Not established.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

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### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Hazardous decomposition products. fume. Carbon monoxide. Carbon dioxide.

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Acute toxicity (oral)             | : Not classified                    |
| Acute toxicity (dermal)           | : Not classified                    |
| Acute toxicity (inhalation)       | : Not classified                    |
| Skin corrosion/irritation         | : Causes skin irritation.           |
| Serious eye damage/irritation     | : Causes serious eye irritation.    |
| Respiratory or skin sensitization | : Not classified                    |
| Germ cell mutagenicity            | : Not classified                    |
| Carcinogenicity                   | : Not classified                    |
| Reproductive toxicity             | : Not classified                    |
| STOT-single exposure              | : May cause respiratory irritation. |
| STOT-repeated exposure            | : Not classified                    |
| Aspiration hazard                 | : Not classified                    |

#### 3((3-cholamidopropyl)dimethylammonio)1-propanesulfonate,dihydrate (75621-03-3)

|                      |                |
|----------------------|----------------|
| Viscosity, kinematic | Not applicable |
|----------------------|----------------|

|   |  |
|---|--|
| Potential Adverse human health effects and symptoms | : Causes skin irritation. May cause respiratory irritation. Causes serious eye irritation.   |
| Symptoms/effects after inhalation                   | : Irritation of the respiratory tract. Irritation of the nasal mucous membranes. FOLLOWING SYMPTOMS MAY APPEAR LATER: Possible laryngeal spasm/oedema. May cause respiratory irritation. |
| Symptoms/effects after skin contact                 | : Tingling/irritation of the skin. Causes skin irritation. Irritation.   |
| Symptoms/effects after eye contact                  | : Irritation of the eye tissue. Eye irritation.  |
| Symptoms/effects after ingestion                    | : None under normal conditions.  |

## SECTION 12 Ecological information

### 12.1. Ecotoxicity

|   |   |
|---|---|
| Ecology - general   | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.  |
| Ecology - air   | : Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573). Not classified as dangerous for the ozone layer (Regulation (EC) No 2024/590). |
| Ecology - water   | : No data available on ecotoxicity.   |
| Hazardous to the aquatic environment, short-term (acute)  | : Not classified  |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified  |

### 12.2. Persistence and degradability

#### 3((3-cholamidopropyl)dimethylammonio)1-propanesulfonate,dihydrate (75621-03-3)

|                               |   |
|-------------------------------|---|
| Persistence and degradability | Biodegradability in water: no data available. |
|-------------------------------|---|

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### 12.3. Bioaccumulative potential

#### 3((3-cholamidopropyl)dimethylammonio)1-propanesulfonate,dihydrate (75621-03-3)

|                           |                                    |
|---------------------------|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |
|---------------------------|------------------------------------|

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Ozone : Not classified  
Fluorinated greenhouse gases : No  
Other information : Avoid release to the environment.

## SECTION 13 Disposal considerations

Regional legislation (waste) : Disposal must be done according to official regulations.  
Waste treatment methods : Waste treatment methods.  
Sewage disposal recommendations : Disposal must be done according to official regulations.  
Product/Packaging disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery. Dissolve or mix with a combustible solvent.  
Additional information : Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.  
Ecological waste information : Avoid release to the environment.

## SECTION 14 Transport information

In accordance with DOT / TDG / IATA

### 14.1. UN number

Not regulated for transport

### 14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not applicable  
Proper Shipping Name (TDG) : Not applicable  
Proper Shipping Name (IATA) : Not regulated

### 14.3. Transport hazard class(es)

**DOT**  
Transport hazard class(es) (DOT) : Not applicable

**TDG**  
Transport hazard class(es) (TDG) : Not applicable

**IATA**  
Transport hazard class(es) (IATA) : Not regulated

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### 14.4. Packing group

Packing group (DOT) : Not applicable  
Packing group (TDG) : Not applicable  
Packing group (IATA) : Not regulated

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Transport in bulk

Not applicable

### 14.7. Special precautions for user

**DOT**  
No data available

**TDG**  
No data available

**IATA**  
Not regulated

## SECTION 15 Regulatory information

### 15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

| Name  | CAS-No.    | Listing     | Commercial status | Flags |
|---|------------|-------------|-------------------|-------|
| 3((3-cholamidopropyl)dimethylammonio)1-propanesulfonate,dihydrate | 75621-03-3 | Not present | -                 |       |

### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. State regulations

No additional information available

## SECTION 16 Other information

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Date of issue : 12/9/2015  
Other information : None.

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| Full text of hazard classes and H-statements |                                  |
|--|----------------------------------|
| H315   | Causes skin irritation           |
| H319   | Causes serious eye irritation    |
| H335   | May cause respiratory irritation |

| Abbreviations and acronyms |   |
|----------------------------|---|
| ACGIH                      | American Conference of Government Industrial Hygienists   |
| ADN                        | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR                        | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE                        | Acute Toxicity Estimate   |
| BCF                        | Bioconcentration factor   |
| BLV                        | Biological limit value  |
| BOD                        | Biochemical oxygen demand (BOD)   |
| CAS-No.                    | Chemical Abstract Service number  |
| CLP                        | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |
| COD                        | Chemical oxygen demand (COD)  |
| CSA                        | Chemical safety assessment  |
| DMEL                       | Derived Minimal Effect level  |
| DNEL                       | Derived-No Effect Level   |
| EC-No.                     | European Community number   |
| EC50                       | Median effective concentration  |
| ED                         | Endocrine disruptor   |
| EN                         | European Standard   |
| EWC                        | European waste catalogue  |
| IARC                       | International Agency for Research on Cancer   |
| IATA                       | International Air Transport Association   |
| IMDG                       | International Maritime Dangerous Goods  |
| LC50                       | Median lethal concentration   |
| LD50                       | Median lethal dose  |
| LOAEL                      | Lowest Observed Adverse Effect Level  |
| Log Kow                    | Partition coefficient n-octanol/water (Log Kow)   |
| Log Pow                    | Partition coefficient n-octanol/water (Log Pow)   |
| MAK                        | maximum workplace concentration   |
| NOAEC                      | No-Observed Adverse Effect Concentration  |
| NOAEL                      | No-Observed Adverse Effect Level  |
| NOEC                       | No-Observed Effect Concentration  |
| N.O.S.                     | Not Otherwise Specified   |

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| Abbreviations and acronyms |  |
|----------------------------|--|
| OECD                       | Organisation for Economic Co-operation and Development                       |
| OEL                        | Occupational Exposure Limit  |
| OSHA                       | Occupational Safety & Health Administration                                  |
| PBT                        | Persistent Bioaccumulative Toxic   |
| PNEC                       | Predicted No-Effect Concentration  |
| PPE                        | Personal protection equipment  |
| RID                        | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS                        | Safety Data Sheet  |
| STP                        | Sewage treatment plant   |
| TF                         | Technical function   |
| ThOD                       | Theoretical oxygen demand (ThOD)   |
| TLM                        | Median Tolerance Limit   |
| TWA                        | Time Weighted Average  |
| VOC                        | Volatile Organic Compounds   |
| vPvB                       | Very Persistent and Very Bioaccumulative                                     |
| UFI                        | Unique Formula Identifier  |

Safety Data Sheet (SDS), USA

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