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

Product information

Product Name: Nose Guard® Masking Agent
Material: 1021684, 1021679, 1021683, 1031148, 1021682, 1029152, 1021681, 1021680

Use: Chemical intermediate

Company: Chevron Phillips Chemical Company LP
Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:

Health:
866.442.9628 (North America)
1.832.813.4984 (International)

Transport:
CHEMTREC 800.424.9300 or 703.527.3887 (int'l)
Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Mexico CHEMTREC 01-800-681-9531 (24 hours)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600
Argentina: +(54)-1159839431

Responsible Department: Product Safety and Toxicology Group
E-mail address: SDS@CPChem.com
Website: www.CPChem.com

ODOR-FADE WARNING

A GAS LEAK CAN CAUSE A FIRE OR EXPLOSION RESULTING IN SERIOUS INJURY OR DEATH.

Be aware that the stenching chemical added to gas to make it detectable may not warn of a gas leak or the presence of propane or natural gas to all persons in every instance.

Instances where the odorant in an odorized gas may be undetectable include:

• Odor intensity may fade or be eliminated for a variety of chemical and physical causes, including the oxidation of rusting pipes, adsorption into or sticking onto the interior of pipes or appliances, or absorption into liquids.
• Contact with soil in underground leaks may de-odorize or remove odorant from the gas.
Some people have a diminished ability, or inability to smell the stench. Factors that negatively affect a person's sense of smell include age, gender, medical conditions, and alcohol/tobacco usage. The stench of odorized gas may not awaken sleeping persons. Other odors may mask or hide the stench. Exposure to the odor for even a short period of time, may cause nasal fatigue, where a person can no longer smell the stench.

Gas detectors listed by the Underwriters Laboratories (UL) can be used as an extra measure of safety for detecting gas leaks, especially under conditions where the odorant alone may not provide an adequate warning. Gas detectors emit a loud, shrill sound when gas is present and do not depend on sense of smell. Because the odor intensity can fade or people may have problems with their sense of smell, we recommend installing, per manufacturer's instructions, one or more combustible gas detectors, in suitable locations to ensure adequate coverage to detect gas leaks.

Educate yourself, your employees, and your customers with the content of this warning and other important facts associated with the so-called "odor-fade phenomenon."

SECTION 2: Hazards identification

Classification of the substance or mixture
This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification:
- Flammable liquids, Category 2
- Skin irritation, Category 2
- Eye irritation, Category 2A
- Skin sensitization, Category 1
- Specific target organ toxicity - single exposure, Category 3
- Central nervous system

Labeling:

Symbol(s):

Signal Word: Danger

Hazard Statements:
- H225: Highly flammable liquid and vapor.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.

Precautionary Statements:

Prevention:
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P280 Wear protective gloves/eye protection/face protection.
Response:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:
P501 Dispose of contents/container to an approved waste disposal plant.

Carcinogenicity:
IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limonene</td>
<td>138-86-3</td>
<td>60</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td>40</td>
</tr>
<tr>
<td>Vanillin</td>
<td>121-33-5</td>
<td>0 - 1</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

General advice: Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.

If inhaled: Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.

In case of skin contact: If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact: Immediately flush eye(s) with plenty of water. Remove contact
## Nose Guard® Masking Agent

### Section 5: Firefighting measures

**Flash point**: 14.4 °C (57.9 °F)  
Method: Tag closed cup

**Autoignition temperature**: No data available

**Suitable extinguishing media**: Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

**Unsuitable extinguishing media**: High volume water jet.

**Specific hazards during fire fighting**: Do not allow run-off from fire fighting to enter drains or water courses.

**Special protective equipment for fire-fighters**: Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

**Fire and explosion protection**: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

**Hazardous decomposition products**: Hydrocarbons. Carbon oxides.

### Section 6: Accidental release measures

**Personal precautions**: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Environmental precautions**: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

**Methods for cleaning up**: Contain spillage, and then collect with non-combustible
Nose Guard® Masking Agent

SECTION 7: Handling and storage

Handling

Advice on safe handling: Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers: No smoking. 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. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Use: Chemical intermediate

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>Basis</th>
<th>Value</th>
<th>Control parameters</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>ACGIH</td>
<td>TWA</td>
<td>200 ppm, CNS impair, URT irr, eye irr, BEI, A4</td>
<td>CNS impair, URT irr, eye irr, BEI, A4</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>400 ppm, CNS impair, URT irr, eye irr, BEI, A4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>400 ppm, 980 mg/m3, (b)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>TWA</td>
<td>400 ppm, 980 mg/m3, (b)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA Z-1-A</td>
<td>STEL</td>
<td>500 ppm, 1,225 mg/m3, (b)</td>
<td></td>
</tr>
</tbody>
</table>

(b) The value in mg/m3 is approximate.

A4 Not classifiable as a human carcinogen
BEI Substances for which there is a Biological Exposure Index or Indices (see BEI® section)
CNS impair Central Nervous System impairment
eye irr Eye irritation
URT irr Upper Respiratory Tract irritation

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.
Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

**Respiratory protection**

Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as:. Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

**Hand protection**

The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

**Eye protection**

Eye wash bottle with pure water. Tightly fitting safety goggles.

**Skin and body protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Remove and wash contaminated clothing before re-use. Skin should be washed after contact. Footwear protecting against chemicals.

**Hygiene measures**

When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

### SECTION 9: Physical and chemical properties

**Information on basic physical and chemical properties**

**Appearance**

- Physical state: Liquid
- Color: Colorless
- Odor: Sweet

**Safety data**

- Flash point: 14.4 °C (57.9 °F)
  - Method: Tag closed cup
- Lower explosion limit: 2 %(V)
- Upper explosion limit: 12 %(V)
SAFETY DATA SHEET

Nose Guard® Masking Agent

Version 2.1

Revision Date 2019-10-25

Autoignition temperature : No data available
Molecular formula : Mixture
Molecular weight : Not applicable
pH : Not applicable
Pour point : No data available

Boiling point/boiling range : 82 °C (180 °F)
Vapor pressure : 1.70 PSI
  at 38 °C (100 °F)
Relative density : 0.8236
  at 16 °C (61 °F)

Water solubility : Partly soluble
Partition coefficient: n-octanol/water : No data available
Viscosity, kinematic : No data available
Relative vapor density : 3.6
  (Air = 1.0)
Evaporation rate : 1
Percent volatile : > 99 %

SECTION 10: Stability and reactivity

Reactivity : Stable under recommended storage conditions.

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

Hazardous reactions : Hazardous reactions: Hazardous polymerization does not occur.

Further information: No decomposition if stored and applied as directed.

Hazardous reactions: Vapors may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.
**Nose Guard® Masking Agent**

**SECTION 11: Toxicological information**

**Nose Guard® Masking Agent**

**Acute oral toxicity**
- Acute toxicity estimate: > 5,000 mg/kg
- Method: Calculation method

**Nose Guard® Masking Agent**

**Acute inhalation toxicity**
- No data available

**Nose Guard® Masking Agent**

**Acute dermal toxicity**
- Acute toxicity estimate: > 5,000 mg/kg
- Method: Calculation method

**Nose Guard® Masking Agent**

**Skin irritation**
- Skin irritation

**Nose Guard® Masking Agent**

**Eye irritation**
- Eye irritation

**Nose Guard® Masking Agent**

**Sensitization**
- Causes sensitization.
  - Information refers to the main ingredient.

**Repeated dose toxicity**

**Isopropanol**
- Species: Rat, male and female
- Sex: male and female
- Application Route: Inhalation
- Dose: 100, 500, 1500, 5000 ppm
- Exposure time: 13 wk
- Number of exposures: 6 h/d, 5 d/wk
- Method: OECD Test Guideline 413
- Target Organs: Liver, Central nervous system, Blood

**Vanillin**
- Species: Rat, male and female
- Sex: male and female
SAFETY DATA SHEET

Nose Guard® Masking Agent

Version 2.1

Application Route: Oral diet
Dose: 20,000, 50,000 ppm
Exposure time: 1 yr
NOEL: 50000 ppm

Genotoxicity in vitro

Limonene

Test Type: Ames test
Result: negative
Remarks: Information given is based on data obtained from similar substances.

Test Type: Mouse lymphoma assay
Result: negative
Remarks: Information given is based on data obtained from similar substances.

Test Type: Chromosome aberration test in vitro
Result: negative
Remarks: Information given is based on data obtained from similar substances.

Isopropanol

Test Type: Ames test
Concentration: 100, 333, 1000, 3333, 10000 ug
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: Sister Chromatid Exchange Assay
Concentration: 0.5, 1, 2, 3, 4, 5 mg/mL
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Vanillin

Test Type: Ames test
Result: negative

Test Type: E. Coli bacterial reverse mutation assay
Result: negative

Test Type: Bacterial DNA repair test
Result: negative

Test Type: Mammalian cell gene mutation assay
Result: negative

Test Type: Sister Chromatid Exchange Assay
Result: positive

Test Type: Cytogenetic assay
Result: positive

Genotoxicity in vivo

Isopropanol

Test Type: Mouse micronucleus assay
Species: Mouse
Cell type: Bone marrow
Route of Application: Intraperitoneal injection
Exposure time: 24, 48, 72 hr
Dose: 350, 1173, 2500, 3500 mg/kg bw
Method: OECD Test Guideline 474
Result: negative

Vanillin
Test Type: Micronucleus test
Method: Mutagenicity (micronucleus test)
Result: negative

Carcinogenicity
Limonene
Species: Rat
Sex: male
Dose: 0.300, 600 mg/kg
Exposure time: 103 wks
Number of exposures: 5 d/wk
Remarks: kidney neoplasia

Species: Mouse
Dose: 0.250, 500 mg/kg
Exposure time: 103 wks
Number of exposures: 5 d/wk
Remarks: No evidence of carcinogenicity

Vanillin
Species: Rat
Dose: 0, 250, 500, 1000 mg/kg
Exposure time: 2 yrs
Number of exposures: daily
Remarks: No evidence of carcinogenicity

Reproductive toxicity
Isopropanol
Species: Rat
Application Route: oral gavage
Dose: 0.100, 500, 1000 mg/kg
Number of exposures: daily
Test period: 10 wks premating
NOAEL Parent: 500 mg/kg
NOAEL F1: 500 mg/kg
NOAEL F2: 500 mg/kg

Vanillin
This information is not available.

Developmental Toxicity
Isopropanol
Species: Rat
Application Route: Inhalation
Dose: 0.400, 800, 1200 mg/kg
Number of exposures: daily
Test period: GD 6-15
NOAEL Teratogenicity: 400 mg/kg
NOAEL Maternal: 400 mg/kg

Vanillin
This information is not available.

No aspiration toxicity classification.
Nose Guard® Masking Agent

Further information:
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12: Ecological information

Ecotoxicity effects
Toxicity to fish

Limonene
- LC50: 0.7 mg/l
- Exposure time: 96 h
- Species: Pimephales promelas (fathead minnow)

Isopropanol
- LC50: 9,640 mg/l
- Exposure time: 96 h
- Species: Pimephales promelas (fathead minnow)

Vanillin
- LC50: 123 mg/l
- Exposure time: 96 h
- Species: Pimephales promelas (fathead minnow)

Flow-through test Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

Limonene
- 0.5 mg/l
- Exposure time: 48 h
- Species: Daphnia magna (Water flea)

Isopropanol
- > 10,000 mg/l
- Exposure time: 24 h
- Species: Daphnia magna (Water flea)

Vanillin
- EC50: 36.79 mg/l
- Exposure time: 48 h
- Species: Daphnia magna (Water flea)

Static test Method: OECD Test Guideline 202

Toxicity to algae

Isopropanol
- EC50: > 1,000 mg/l
- Exposure time: 72 h
- Species: Desmodesmus subspicatus (green algae)

Vanillin
- ErC50: 120 mg/l
- Exposure time: 72 h
- Species: Pseudokirchneriella subcapitata (green algae)

Growth inhibition Method: OECD Test Guideline 201

Biodegradability
- This material is not expected to be readily biodegradable.

Further information on ecology
Biochemical Oxygen Demand (BOD)
Vanillin : 1.26 mg/g

Chemical Oxygen Demand (COD)
Vanillin : 1.76 mg/g

Elimination information (persistence and degradability)
Bioaccumulation : No data available
Mobility : No data available

Results of PBT assessment
Vanillin : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information
Vanillin : Very toxic to aquatic life., Very toxic to aquatic life with long lasting effects.

Ecotoxicology Assessment
Short-term (acute) aquatic hazard : Very toxic to aquatic life.
Long-term (chronic) aquatic hazard : Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.). Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the
bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)
UN1993, FLAMMABLE LIQUIDS, N.O.S., (ISOPROPANOL, LIMONENE), 3, II

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)
UN1993, FLAMMABLE LIQUID, N.O.S., (ISOPROPANOL, LIMONENE), 3, II, (14.4 °C), MARINE POLLUTANT, (LIMONENE)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)
UN1993, FLAMMABLE LIQUID, N.O.S., (ISOPROPANOL, LIMONENE), 3, II

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))
UN1993, FLAMMABLE LIQUID, N.O.S., (ISOPROPANOL, LIMONENE), 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (LIMONENE)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))
UN1993, FLAMMABLE LIQUID, N.O.S., (ISOPROPANOL, LIMONENE), 3, II, ENVIRONMENTALLY HAZARDOUS, (LIMONENE)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)
UN1993, FLAMMABLE LIQUID, N.O.S., (ISOPROPANOL, LIMONENE), 3, II, ENVIRONMENTALLY HAZARDOUS, (LIMONENE)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National legislation

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)

CERCLA Reportable Quantity : This material does not contain any components with a CERCLA RQ.

SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.
SARA 302 Threshold Planning Quantity: This material does not contain any components with a section 302 EHS TPQ.

SARA 304 Reportable Quantity: This material does not contain any components with a section 304 EHS RQ.

SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313:

- Isopropanol - 67-63-0

Clean Air Act

Ozone-Depletion Potential: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

- Isopropanol - 67-63-0

US State Regulations

Pennsylvania Right To Know: Isopropanol - 67-63-0

Limonene - 138-86-3

California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Notification status

Europe REACH: Not in compliance with the inventory

Switzerland CH INV: On the inventory, or in compliance with the inventory

United States of America (USA) TSCA: On the inventory, or in compliance with the inventory
Nose Guard® Masking Agent

Version 2.1

Revision Date 2019-10-25

Canada DSL : On the inventory, or in compliance with the inventory
Australia AICS : On the inventory, or in compliance with the inventory
New Zealand NZIoC : Not in compliance with the inventory
Japan ENCS : On the inventory, or in compliance with the inventory
Korea KECI : A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance.

Philippines PICCS : On the inventory, or in compliance with the inventory
China IECSC : On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification

Health Hazard: 2
Fire Hazard: 3
Reactivity Hazard: 0

Further information

Legacy SDS Number : 35230

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

### Key or legend to abbreviations and acronyms used in the safety data sheet

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose 50%</td>
</tr>
<tr>
<td>AICS</td>
<td>Australia, Inventory of Chemical Substances</td>
</tr>
<tr>
<td>LOAEL</td>
<td>Lowest Observed Adverse Effect Level</td>
</tr>
<tr>
<td>DSL</td>
<td>Canada, Domestic Substances List</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Agency</td>
</tr>
<tr>
<td>NDSL</td>
<td>Canada, Non-Domestic Substances List</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service</td>
</tr>
<tr>
<td>NZIoC</td>
<td>New Zealand Inventory of Chemicals</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration</td>
</tr>
<tr>
<td>NOAEL</td>
<td>No Observable Adverse Effect Level</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>NOEC</td>
<td>No Observable Effect Concentration</td>
</tr>
<tr>
<td>EGEST</td>
<td>EOSCA Generic Exposure Scenario Tool</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety &amp; Health Administration</td>
</tr>
<tr>
<td>EOSCA</td>
<td>European Oilfield Specialty</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
</tbody>
</table>

SDS Number:100000013298  15/16
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS</td>
<td>European Inventory of Existing Chemical Substances</td>
</tr>
<tr>
<td>PICCS</td>
<td>Philippines Inventory of Commercial Chemical Substances</td>
</tr>
<tr>
<td>MAK</td>
<td>Germany Maximum Concentration Values</td>
</tr>
<tr>
<td>PRNT</td>
<td>Presumed Not Toxic</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation Recovery Act</td>
</tr>
<tr>
<td>&gt;=</td>
<td>Greater Than or Equal To</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term Exposure Limit</td>
</tr>
<tr>
<td>IC50</td>
<td>Inhibition Concentration 50%</td>
</tr>
<tr>
<td>SARA</td>
<td>Resource Conservation Recovery Act</td>
</tr>
<tr>
<td>ICARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>IECSC</td>
<td>Inventory of Existing Chemical Substances in China</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>ENCS</td>
<td>Japan, Inventory of Existing and New Chemical Substances</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substance Control Act</td>
</tr>
<tr>
<td>KECI</td>
<td>Korea, Existing Chemical Inventory</td>
</tr>
<tr>
<td>UVCB</td>
<td>Unknown or Variable Composition, Complex Reaction Products, and Biological Materials</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less Than or Equal To</td>
</tr>
<tr>
<td>WHMIS</td>
<td>Workplace Hazardous Materials Information System</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
</tr>
</tbody>
</table>