

Version 1.9

Revision Date: 04/08/2015

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| Methanol                         |
|----------------------------------|
| Solvent., Fuel, Animal Feedstock |
|                                  |

#### Manufacturer or supplier's details

Company Address : Famis Inc 5689 NW 35<sup>th</sup> ct Miami FL, 33142 United States of America

#### **Emergency telephone number:**

Transport North America: CHEMTREC 800.424.9300

#### SECTION 2. HAZARDS IDENTIFICATION

#### **GHS Classification**

| Flammable liquids  | : Category 2  |
|--|---|
| Acute toxicity (Oral)<br>Acute toxicity<br>(Inhalation)                          | : Category 3<br>: Category 3                                |
| Acute toxicity (Dermal)<br>Specific target organ tox-<br>icity - single exposure | : Category 3<br>: Category 1 (Eyes, Central nervous system) |
| GHS Label element<br>Hazard pictograms   |   |

Signal word

: Danger

Hazard statements

: H225 Highly flammable liquid and vapour.



Version 1.9 Revision Date: 04/08/2015 H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled H370 Causes damage to organs (Eyes, Central nervous system). Precautionary statements : Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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. P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ eye protection/ face protection. **Response:** P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 + P311 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician. P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant. **Potential Health Effects** 

Carcinogenicity:

IARC

No component of this product present at levels greater



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|             | 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. |
| 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.  |
| NTP         | No component of this product present at levels greater than or equal to 0.1% is identified as a known or antic-<br>ipated carcinogen by NTP. |

#### **Emergency Overview**

| Appearance     | liquid                    |
|----------------|---------------------------|
| Colour         | colourless, clear         |
| Odour          | mild, alcohol-like        |
| Hazard Summary | No information available. |

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Pure substance

#### **Hazardous components**

| CAS-No.        | Chemical Name | Concentration (%) |
|----------------|---------------|-------------------|
| 67-56-1        | 90 - 100      |                   |
| Molecular form | ula : C-H4-O  |                   |

Synonyms : Methyl alcohol,

#### **SECTION 4. FIRST AID MEASURES**

| General advice | <ul> <li>Move out of dangerous area.</li> <li>Consult a physician.</li> <li>Show this safety data sheet to the doctor in atten-<br/>dance.</li> <li>Do not leave the victim unattended.</li> </ul> |
|----------------|--|
| If inhaled     | : If unconscious place in recovery position and seek   |



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|                         | medical advice.<br>If symptoms persist, call a physician.<br>Oxygen or artificial respiration if needed.  |
| In case of skin contact | <ul> <li>If on skin, rinse well with water.</li> <li>If on clothes, remove clothes.</li> <li>If skin irritation persists, call a physician.</li> </ul>  |
| In case of eye contact  | <ul> <li>Immediately flush eyes for at least 15 minutes. Get<br/>medical attention.</li> <li>Remove contact lenses.</li> <li>Protect unharmed eye.</li> <li>Keep eye wide open while rinsing.</li> <li>If eye irritation persists, consult a specialist.</li> </ul> |
| If swallowed            | <ul> <li>Keep respiratory tract clear.</li> <li>Do not give milk or alcoholic beverages.</li> <li>Never give anything by mouth to an unconscious person.</li> <li>If symptoms persist, call a physician.</li> <li>Take victim immediately to hospital.</li> </ul>   |

#### SECTION 5. FIREFIGHTING MEASURES

| Suitable extinguishing media         | : Alcohol-resistant foam<br>Water spray<br>Dry chemical<br>Carbon dioxide (CO2)   |
|--------------------------------------|---|
| Unsuitable extinguishing media       | : High volume water jet   |
| Specific hazards during firefighting | : Do not allow run-off from fire fighting to enter drains or water courses.   |
| Hazardous combustion products        | : Carbon oxides<br>toxic fumes  |
| Specific extinguishing methods       | : Use a water spray to cool fully closed containers.  |
| Further information                  | <ul> <li>Collect contaminated fire extinguishing water separately. This must not be discharged into drains.</li> <li>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.</li> <li>For safety reasons in case of fire, cans should be stored separately in closed containments.</li> </ul> |



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| Special protective equip-<br>ment for firefighters | : Wear self-contained breathing apparatus for firefight-<br>ing if necessary. |

## NFPA Flammable and Combustible Liquids Classification:

Flammable Liquid Class IB

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

| Personal precautions,<br>protective equipment and<br>emergency procedures | : | Ensure adequate ventilation.<br>Remove all sources of ignition.<br>Evacuate personnel to safe areas.<br>Beware of vapours accumulating to form explosive<br>concentrations. Vapours can accumulate in low areas.                                 |
|---|---|--|
| Environmental precau-<br>tions  | : | Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains<br>inform respective authorities.   |
| Methods and materials<br>for containment and<br>cleaning up               | : | Contain spillage, and then collect with non-<br>combustible absorbent material, (e.g. sand, earth,<br>diatomaceous earth, vermiculite) and place in con-<br>tainer for disposal according to local / national regula-<br>tions (see section 13). |

#### **SECTION 7. HANDLING AND STORAGE**

| Advice on safe handling          | : | Avoid formation of aerosol.<br>Do not breathe vapours/dust.<br>For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in<br>the application area.<br>Take precautionary measures against static dis-<br>charges.<br>Provide sufficient air exchange and/or exhaust in work<br>rooms.<br>Container may be opened only under exhaust ventila-<br>tion hood.<br>Open drum carefully as content may be under pres-<br>sure.<br>Dispose of rinse water in accordance with local and<br>national regulations. |
|----------------------------------|---|--|
| Conditions for safe sto-<br>rage | : | No smoking.<br>Keep container tightly closed in a dry and well-<br>ventilated place.   |



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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.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| CAS-No. | Components | Value type<br>(Form of<br>exposure) | Control parame-<br>ters / Permissi-<br>ble concentra-<br>tion | Basis     |
|---------|------------|-------------------------------------|---|-----------|
| 67-56-1 | Methanol   | TWA                                 | 200 ppm   | ACGIH     |
|         |            | STEL                                | 250 ppm   | ACGIH     |
|         |            | TWA                                 | 200 ppm<br>260 mg/m3  | NIOSH REL |
|         |            | ST                                  | 250 ppm<br>325 mg/m3  | NIOSH REL |
|         |            | TWA                                 | 200 ppm<br>260 mg/m3  | OSHA Z-1  |
|         |            | STEL                                | 250 ppm<br>325 mg/m3  | OSHA PO   |
|         |            | TWA                                 | 200 ppm<br>260 mg/m3  | OSHA PO   |

#### **Components with workplace control parameters**

#### **Biological occupational exposure limits**

| Components | CAS-No. | Control<br>parame-<br>ters | Biological<br>specimen |  | Permissi-<br>ble con-<br>centration | Basis        |
|------------|---------|----------------------------|------------------------|--|-------------------------------------|--------------|
| Methanol   | 67-56-1 | Methanol                   | Urine                  | End of<br>shift<br>(As<br>soon as<br>possible<br>after<br>expo-<br>sure<br>ceases) | 15 mg/l                             | ACGIH<br>BEI |

#### **Personal protective equipment**

Respiratory protection

: No personal respiratory protective equipment normally required. In the case of vapour formation use a respirator with an approved filter.

Hand protection



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|--------------------------|---|
| Remarks                  | : The suitability for a specific workplace should be dis-<br>cussed with the producers of the protective gloves.                              |
| Eye protection           | : Eye wash bottle with pure water<br>Tightly fitting safety goggles   |
| Skin and body protection | : impervious clothing<br>Choose body protection according to the amount and<br>concentration of the dangerous substance at the work<br>place. |
| Hygiene measures         | : Avoid contact with skin, eyes and clothing.<br>Wash hands before breaks and immediately after<br>handling the product.                      |

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance   | : liquid                                      |
|--|---|
| Colour   | : colourless, clear                           |
| Odour  | : mild, alcohol-like                          |
| Odour Threshold  | : 4.2 - 8940 ppm                              |
| pH<br>Freezing Point (Melting<br>point/freezing point) | : No data available<br>: -97.8 °C (-144.0 °F) |
| Boiling Point (Boiling<br>point/boiling range)         | : 64 °C (147 °F)                              |
| Flash point  | : 11 °C (52 °F)                               |
| Evaporation rate                                       | : 5.9   |
| Flammability (solid, gas)                              | n-Butyl Acetate<br>: No data available        |
| Burning rate   | : No data available                           |
| Upper explosion limit                                  | : 36.5 %(V)                                   |
|  |   |
| Lower explosion limit                                  | : 6 %(V)                                      |
| Vapour pressure  | : 96 mmHg @ 20 °C (68 °F)                     |



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| Relative vapour density  | : 1.01 @ 15 - 20 °C (59 - 68 °F)<br>AIR=1             |
|--|---|
| Relative density   | : 0.791 - 0.793Reference substance: (water = 1)       |
| Density  | : No data available                                   |
| Bulk density   | : No data available                                   |
| Solubility(ies)<br>Water solubility<br>Solubility in other sol-<br>vents | : completely soluble<br>: soluble<br>Solvent: Benzene |
|  | soluble<br>Solvent: Alcohol                           |
|  | soluble<br>Solvent: Chloroform                        |
|  | soluble<br>Solvent: Acetone                           |
|  | soluble<br>Solvent: Ether                             |
| Partition coefficient: n-<br>octanol/water                               | : log Pow: -0.820.66                                  |
| Auto-ignition temperature  | : No data available                                   |
| Thermal decomposition  | : No data available                                   |
|  |   |

#### SECTION 10. STABILITY AND REACTIVITY

| Reactivity  | : No dangerous reaction known under conditions of normal use.                                   |
|---|---|
| Chemical stability<br>Possibility of hazardous<br>reactions | <ul><li>Stable under normal conditions.</li><li>No hazards to be specially mentioned.</li></ul> |
| Conditions to avoid   | : Heat, flames and sparks.  |



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| Incompatible materials           | : Strong bases<br>strong mineral acids<br>strong organic acids<br>strong oxidizing agents<br>halogenated hydrocarbons<br>Aluminium<br>Lead<br>Copper alloys<br>Zinc<br>magnesium |
|----------------------------------|--|
| Hazardous decomposition products | : carbon dioxide and carbon monoxide<br>Formaldehyde<br>formic acid<br>toxic fumes   |

#### SECTION 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

#### **Components:**

| 67-56-1:<br>Acute oral toxicity | : LD50 (rat): 100 mg/kg<br>Assessment: The component/mixture is toxic after<br>single ingestion.            |
|---------------------------------|---|
| Acute inhalation toxicity       | : LC50 (rat): 5 mg/l<br>Assessment: The component/mixture is toxic after<br>short term inhalation.          |
| Acute dermal toxicity           | : LD50 (rabbit): 300 mg/kg<br>Assessment: The component/mixture is toxic after<br>single contact with skin. |

#### Skin corrosion/irritation

#### Components:

**67-56-1:** Species: rabbit Result: No skin irritation

#### Serious eye damage/eye irritation

#### Components:

67-56-1: Species: rabbit



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Result: No eye irritation

#### Respiratory or skin sensitisation

#### **Components:**

**67-56-1:** Test Type: Maximisation Test (GPMT) Species: guinea pig Method: OECD Test Guideline 406 Result: Did not cause sensitisation on laboratory animals.

#### Germ cell mutagenicity

| Components:<br>67-56-1:<br>Genotoxicity in vitro                                | : Test Type: DNA damage and/or repair<br>Metabolic activation: with and without metabolic acti-<br>vation<br>Result: Ambiguous   |
|---|--|
|   | <ul> <li>Test Type: In vivo micronucleus test<br/>Test species: mouse (male and female)<br/>Cell type: Bone marrow<br/>Application Route: Intraperitoneal<br/>Exposure time: Single<br/>Dose: 0, 1920, 3200, 4480 mg/kg<br/>Result: negative</li> <li>Tests on bacterial or mammalian cell cultures did not</li> </ul> |
| Germ cell mutagenicity-<br>Assessment   | show mutagenic effects.  |
| Carcinogenicity<br>Components:<br>67-56-1:<br>Carcinogenicity - As-<br>sessment | : Not classifiable as a human carcinogen.  |
| Reproductive toxicity   |  |
| <b>Components:</b><br>67-56-1:<br>Effects on fertility                          | : Test Type: Two-generation study<br>Species: rat, male and female<br>Application Route: Inhalation<br>Dose: 0, 0.013, 0.13, 1.3 mg/L<br>Duration of Single Treatment: 20 h<br>General Toxicity - Parent: NOAEC: 1.3 mg/l<br>General Toxicity F1: NOAEC: 0.13 mg/l   |



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|             | Fertility: NOAEC: 1.3 mg/l |                           |

|                         | Tertifity. NOALC. 1.5 Hig/1                                   |
|-------------------------|---|
|                         | Symptoms: Effects on postnatal development.                   |
|                         | Result: Animal testing did not show any effects on fertility. |
| Reproductive toxicity - | : Fertility classification not possible from current data.    |
| Assessment              | Embryotoxicity classification not possible from current data. |

## STOT - single exposure

Product: No data available

## **Components:** 67-56-1:

| Exposure routes: | Target Organs:                    | Assessment:  | Remarks: |
|------------------|-----------------------------------|--|----------|
|                  | Eyes, Central nerv-<br>ous system | Causes damage to<br>organs., The sub-<br>stance or mixture is<br>classified as specific<br>target organ tox-<br>icant, single expo-<br>sure, category 1. |          |

#### **STOT - repeated exposure**

Product: No data available

#### Components:

67-56-1:No data available

#### **Repeated dose toxicity**

#### **Components:**

#### 67-56-1:

Species: mouse, male and female NOAEL: 1.3 mg/l Application Route: Inhalation Exposure time: 12 mths Number of exposures: Continuous Dose: 0, 0.013, 0.13, 1.3 mg/L

#### **Aspiration toxicity**

#### Product:

No aspiration toxicity classification

#### **Further information**

#### Product:



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Remarks: Solvents may degrease the skin.

#### SECTION 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

| <u>Components:</u><br>67-56-1:                       |  |
|--|--|
| Toxicity to fish                                     | <ul> <li>LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l</li> <li>Exposure time: 96 h</li> <li>Test Type: flow-through test</li> </ul>                                      |
| Toxicity to daphnia and other aquatic inverte-brates | : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l<br>Exposure time: 48 h<br>Test Type: static test  |
| Toxicity to algae                                    | : EC50 (Scenedesmus capricornutum (fresh water al-<br>gae)): 22,000 mg/l<br>End point: Growth rate<br>Exposure time: 96 h<br>Test Type: static test<br>Method: OECD Test Guideline 201 |
| Toxicity to bacteria                                 | <ul> <li>IC50 (activated sludge): &gt; 1,000 mg/l<br/>End point: Growth rate<br/>Exposure time: 3 h<br/>Test Type: Static<br/>Method: OECD Test Guideline 209</li> </ul>               |

#### Persistence and degradability

| <u>Components:</u><br>67-56-1:       |   |
|--------------------------------------|---|
| Biodegradability                     | : aerobic<br>Result: Readily biodegradable.<br>Biodegradation: 72 %<br>Remarks: Readily biodegradable |
| Biochemical Oxygen De-<br>mand (BOD) | : 600 - 1,120 mg/g  |
| Chemical Oxygen De-<br>mand (COD)    | : 1,420 mg/g  |
| BOD/COD                              | : BOD: 600 - 1120COD: 1420  |



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| Stability in water :                              | Hydrolysis: 91 % at19 °C(72 h)<br>Remarks: Hydrolyses on contact with water.<br>Hydrolyses readily.  |
| <b>Bioaccumulative potential</b>                  |  |
| Components:<br>67-56-1:<br>Bioaccumulation :      | Species: Cyprinus carpio (Carp)<br>Bioconcentration factor (BCF): 1.0<br>Exposure time: 72 d<br>Temperature: 20 °C<br>Concentration: 5 mg/l<br>Remarks: This substance is not considered to be very<br>persistent nor very bioaccumulating (vPvB). |
| Partition coefficient: n- :<br>octanol/water      | log Pow: -0.77   |
| <b>Mobility in soil</b><br>No data available      |  |
| <b>Other adverse effects</b><br>No data available |  |
| Product:<br>Regulation                            | 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances   |
| Remarks   | This product neither contains, nor was manufactured<br>with a Class I or Class II ODS as defined by the U.S.<br>Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A<br>+ B).   |
| Additional ecological in- :<br>formation          | No data available  |

#### SECTION 13. DISPOSAL CONSIDERATIONS

| Disposal | methods |
|----------|---------|
|----------|---------|

| Waste from residues | : Dispose of in accordance with all applicable local,   |
|---------------------|---|
|                     | state and federal regulations.  |
|                     | For assistance with your waste management needs -<br>including disposal, recycling and waste stream reduc-<br>tion, |



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| Contaminated packaging | <ul> <li>Empty remaining contents.</li> <li>Dispose of as unused product.</li> <li>Do not re-use empty containers.</li> <li>Do not burn, or use a cutting torch on, the empty</li> </ul> |
|------------------------|--|
|                        | drum.  |

#### **SECTION 14. TRANSPORT INFORMATION**

**IATA (International Air Transport Association)**: UN1230, METHANOL, 3 (6.1), II, Flash Point:11 °C(52 °F)

IMDG (International Maritime Dangerous Goods): UN1230, METHANOL, 3, (6.1), II

DOT (Department of Transportation): UN1230, Methanol, 3, II

#### **SECTION 15. REGULATORY INFORMATION**

| OSHA Hazards         | : Flammable liquid, Toxic by ingestion, Toxic by skin absorption                             |
|----------------------|--|
| WHMIS Classification | : B2: Flammable liquid<br>D1B: Toxic Material Causing Immediate and Serious<br>Toxic Effects |

#### **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### **CERCLA Reportable Quantity**

| Components | CAS-No. | Component<br>RO (lbs) | Calculated product<br>RO (lbs) |
|------------|---------|-----------------------|--------------------------------|
|            |         | RQ (IDS)              | KŲ (IDS)                       |
| Methanol   | 67-56-1 | 5000                  | 5000                           |

| SARA 304 Extremely Hazardous Substances Reportable Quantity |   |  |  |  |
|---|---|--|--|--|
| This material does not co                                   | ontain any components with a section 304 EHS RQ.  |  |  |  |
| SARA 311/312  | : Fire Hazard   |  |  |  |
| Hazards   | Acute Health Hazard   |  |  |  |
| SARA 302  | : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. |  |  |  |
| SARA 313  | : The following components are subject to reporting levels established by SARA Title III, Section 313:              |  |  |  |



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|   | 67-56-1   | Methanol                                       | 100 %                                 |
| Clean Air Act   |   |  |                                       |
| The following chemical(s)   | ) are listed as HA  | AP under the U.S. Cle                          | an Air Act, Section 12                |
| (40 CFR 61):<br>67-56-1   | Methanol  |  | 100 %                                 |
| This product does not con<br>Section 112(r) for Accide<br>The following chemical(s)<br>Intermediate or Final VO   | ntain any chemio<br>ntal Release Pre<br>) are listed unde | vention (40 CFR 68.1<br>r the U.S. Clean Air A | J.S. Clean Air Act<br>30, Subpart F). |
|   | Methanol  |  | 100 %                                 |
| Clean Water Act   |   |  |                                       |
| This product does not con<br>Water Act, Section 311, <sup>-</sup><br>This product does not con<br>Act Section 307                                       | Table 117.3.  |  |                                       |
| US State Regulations  |   |  |                                       |
| Massachusetts Right T<br>67-56-1  | <b>o Know</b><br>Methanol                                 |  | 90 - 100 %                            |
| Pennsylvania Right To   | Know  |  |                                       |
| 67-56-1   | Methanol  |  | 90 - 100 %                            |
| New Jersey Right To Know  |   |  |                                       |
| 67-56-1   | Methanol  |  | 90 - 100 %                            |
| <b>California Prop 65</b> WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. |   |  |                                       |
| 67-56-1   | Methanol  |  |                                       |
| The components of this product are reported in the following inventories:   |   |  |                                       |
| Switzerland. New notif  | ied substance   | s and declared :                               | y (positive listing)                  |

| Switzerland. New notified substances and declared preparations | :   | y (positive listing)<br>(The formulation<br>contains substances<br>listed on the Swiss<br>Inventory) |
|--|-----|--|
| United States TSCA Inventory                                   | :   | y (positive listing)<br>(On TSCA Inven-<br>tory)   |
| Canadian Domestic Substances List (DSL)                        | ••• | y (positive listing)<br>(All components of<br>this product are on                                    |



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|   |   | the Canadian DSL.)  |
|---|---|---|
| Australia Inventory of Chemical Substances (AICS)                     | : | y (positive listing)<br>(On the inventory,<br>or in compliance<br>with the inventory) |
| New Zealand. Inventory of Chemical Substances                         | : | y (positive listing)<br>(On the inventory,<br>or in compliance<br>with the inventory) |
| Japan. ENCS - Existing and New Chemical<br>Substances Inventory       | : | y (positive listing)<br>(On the inventory,<br>or in compliance<br>with the inventory) |
| Japan. ISHL - Inventory of Chemical Substances<br>(METI)              | : | y (positive listing)<br>(On the inventory,<br>or in compliance<br>with the inventory) |
| Korea. Korean Existing Chemicals Inventory (KECI)                     | : | y (positive listing)<br>(On the inventory,<br>or in compliance<br>with the inventory) |
| Philippines Inventory of Chemicals and Chemical<br>Substances (PICCS) | : | y (positive listing)<br>(On the inventory,<br>or in compliance<br>with the inventory) |
| China. Inventory of Existing Chemical Substances in<br>China (IECSC)  | : | y (positive listing)<br>(On the inventory,<br>or in compliance<br>with the inventory) |

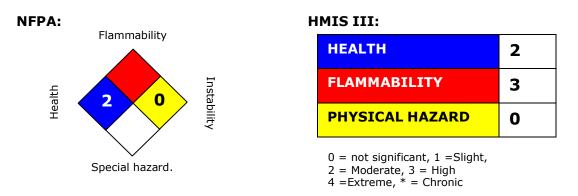


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#### **SECTION 16. OTHER INFORMATION**

#### **Further information**



The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

#### Legecy MSDS: R0001447, 14000001042

#### Material number:

16076584, 20298, 160329, 20303, 16056428, 16061181, 16056425, 16056426, 16056427, 16055184, 16053934, 16049742, 16048212, 16047323, 16039562, 16034861, 16032613, 16031073, 16024445, 16024444, 16021152, 16018469, 16016316, 779915, 743459, 736115, 730007, 730006, 717897, 716726, 713298, 710534, 699273, 695309, 695256, 694361, 689940, 690224, 682513, 638917, 627702, 625491, 602665, 600798, 554053, 554376, 554361, 554308, 554052, 554159, 546854, 546132, 508417, 122681, 136311, 117978, 132227, 131334, 146769, 161018, 118306, 116867, 117981, 145658, 161021, 144602, 130207, 130736, 131538, 159527, 115232, 82339, 160328, 82470, 115098, 159524, 115229, 143136, 508297, 504381, 504224, 501342, 39841, 22244, 22243, 20305, 20304, 20302, 20301, 20300, 20299, 20297, 500031

| Key or legend to abbreviations and acronyms used in the safety data sheet |                               |       |                                |  |  |
|---|-------------------------------|-------|--------------------------------|--|--|
| ACGIH   | American Conference of Gov-   | LD50  | Lethal Dose 50%                |  |  |
|   | ernment Industrial Hygienists |       |                                |  |  |
| AICS  | Australia, Inventory of Chem- | LOAEL | Lowest Observed Adverse Effect |  |  |



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|        | ical Substances  |                          | Level   |
|--------|--|--------------------------|---|
| DSL    | Canada, Domestic Sub-<br>stances List                            | NFPA                     | National Fire Protection Agency   |
| NDSL   | Canada, Non-Domestic Sub-<br>stances List                        | NIOSH                    | National Institute for Occupational<br>Safety & Health                                    |
| CNS    | Central Nervous System   | NTP                      | National Toxicology Program   |
| CAS    | Chemical Abstract Service  | NZIoC                    | New Zealand Inventory of Chemicals  |
| EC50   | Effective Concentration  | NOAEL                    | No Observable Adverse Effect Level  |
| EC50   | Effective Concentration 50%                                      | NOEC                     | No Observed Effect Concentration  |
| EGEST  | EOSCA Generic Exposure<br>Scenario Tool                          | OSHA                     | Occupational Safety & Health Admin-<br>istration  |
| EOSCA  | European Oilfield Specialty<br>Chemicals Association             | PEL                      | Permissible Exposure Limit  |
| EINECS | European Inventory of Exist-<br>ing Chemical Substances          | PICCS                    | Philipines Inventory of Commercial<br>Chemical Substances                                 |
| MAK    | Germany Maximum Concen-<br>tration Values                        | PRNT                     | Presumed Not Toxic  |
| GHS    | Globally Harmonized System                                       | RCRA                     | Resource Conservation Recovery Act  |
| >=     | Greater Than or Equal To   | STEL                     | Short-term Exposure Limit   |
| IC50   | Inhibition Concentration 50%                                     | SARA                     | Superfund Amendments and Reau-<br>thorization Act.  |
| IARC   | International Agency for Re-<br>search on Cancer                 | TLV                      | Threshold Limit Value   |
| IECSC  | Inventory of Existing Chemi-<br>cal Substances in China          | TWA                      | Time Weighted Average   |
| ENCS   | Japan, Inventory of Existing<br>and New Chemical Sub-<br>stances | TSCA                     | Toxic Substance Control Act   |
| KECI   | Korea, Existing Chemical In-<br>ventory                          | UVCB                     | Unknown or Variable Compositon,<br>Complex Reaction Products, and<br>Biological Materials |
| <=     | Less Than or Equal To  | WHMIS                    | Workplace Hazardous Materials In-<br>formation System                                     |
| LC50   |  | Lethal Concentration 50% |   |