C-CARE, LLC **RAW MATERIAL SPECIFICATION**

C-CARE ITEM NUMBER: 80851 CUSTOMER ITEM NUMBER: GCAS: 10050198.021 **ITEM DESCRIPTION:** ALCOHOL SDA- 40 B ALCOHOL SDA 40 B CTFA / INCI NAME:

CAS#:

CUSTOMER: Procter & Gamble

N

APPROVED VENDORS: NEXEO

| TEST NAME AND REQUIREMENT | TEST METHOD |
|---|-------------|
| *APPEARANCE: Colorless Clear Liquid | 60044625 |
| *COLOR ASTM D 1209 USL 10 | 60076026 |
| *INFRA-RED ANALYSIS: Conforms to Standard | 96812788 |
| *ODOR: Characteristic, Dilute 75/25 EtOH/ H2O P&G Method GCAS # | 64021828 |
| *SPECIFIC GRAVITY: 0.8040 - 0.8161 @ 60 F | 60076026 |
| MICRO: Not Required | N/A |
| | |

Shelf Life: 5 years

NOTE: * = Tests that must be performed for releasing the product.

APPROVED BY: _

Adality Assurance

DATE OF THIS ISSUE: 5/11/2018

Page 1 of 1

C-Care, LLC 979 Corporate Blvd. Linthicum Heights, MD 21090 (410)-850-0035



Version 1.3

Revision Date: 08/28/2018

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION Ethanol SDA 40B 190 Proof **Product name** Recommended use of the chemical and restrictions on use Recommended use : Industrial chemical Manufacturer or supplier's details Company Nexeo Solutions, LLC. Address 3 Waterway Square Place Suite 1000 The Woodlands, TX. 77380 United States of America Emergency telephone number: Health North America: 1-855-NEXEO4U (1-855-639-3648) Health International: 1-855-NEXEO4U (1-855-639-3648) Transport North America: CHEMTREC (1-800-424-9300) Additional Information: : Responsible Party: Product Safety Group E-Mail: msds@nexeosolutions.com SDS Requests: 1-855-429-2661 SDS Requests Fax: 1-281-500-2370 Website: www.nexeosolutions.com

SECTION 2. HAZARDS IDENTIFICATION

| GHS Classification Flammable liquids | ; | Category 2 |
|---|---|--|
| Eye irritation | : | Category 2A |
| Specific target organ toxicity - single exposure | : | Category 3 (Respiratory system, Central nervous system) |
| GHS label elements | | |
| Hazard pictograms | 5 | |
| Signal word | : | Danger |
| Hazard statements | : | H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H335 May cause respiratory 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. |



| ersion 1.3 | Revision Date: 08/28/2018 |
|------------|--|
| | P241 Use explosion-proof electrical/ventilating/lighting/equip- |
| | ment. |
| | P242 Use only non-sparking tools. |
| | P243 Take precautionary measures against static discharge. |
| | P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| | P264 Wash skin thoroughly after handling. |
| | P271 Use only outdoors or in a well-ventilated area. |
| | P280 Wear protective gloves/ eye protection/ face protection. Response: |
| | P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off |
| | immediately all contaminated clothing. Rinse skin with water/ shower. |
| | P304 + P340 + P312 IF INHALED: 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. |
| | P305 + P351 + P338 IF IN EYES: Rinse cautiously with water |
| | for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | P337 + P313 If eye irritation persists: Get medical advice/ atten- tion. |
| | P370 + P378 In case of fire: Use dry sand, dry chemical or alco- hol-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 dis- |
| | posal plant. |

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

| CAS-No. | Chemical name | Weight percent |
|---------|---------------|----------------|
| 64-17-5 | Ethanol | 90 - 100 |

Any Concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

| General advice | Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended. |
|----------------|--|
| If inhaled | If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician. |



| sion 1.3 | Revision Date: 08/28/2018 |
|-------------------------|---|
| In case of skin contact | : If on skin, rinse well with water. If on clothes, remove clothes. |
| In case of eye contact | Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| If swallowed | Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. |

SECTION 5. FIREFIGHTING MEASURES

| Suitable extinguishing media | ; | Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical |
|---|---|--|
| Unsuitable extinguishing media | 3 | High volume water jet |
| Specific hazards during fire- fighting | : | Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion prod- ucts | : | No hazardous combustion products are known |
| Specific extinguishing meth- ods | ş | Use a water spray to cool fully closed containers. |
| 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 sepa- rately in closed containments. |
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if nec- essary. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protec- tive equipment and emer- gency procedures | ¢ | Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentra- tions. Vapours can accumulate in low areas. |
|---|---|--|
| Environmental precautions | ÷ | Prevent product from entering drains. |



| rsion 1.3 | Revision Date: 08/28/2018 |
|--|--|
| | Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | Contain spillage, and then collect with non-combustible ab- sorbent material, (e.g. sand, earth, diatomaceous earth, ver- miculite) and place in container for disposal according to local / national regulations (see section 13). |
| TION 7. HANDLING AND STO | RAGE |
| Advice on protection against fire and explosion | : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. |
| Advice on safe handling | Avoid formation of aerosol. 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. Container may be opened only under exhaust ventilation hood. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage | 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. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| CAS-No. | Components | Value type (Form of exposure) | Control parame- ters / Permissible concentration | Basis |
|---------|------------|-------------------------------------|--|-----------|
| 64-17-5 | Ethanol | TWA | 1,000 ppm | ACGIH |
| | | TWA | 1,000 ppm 1,900 mg/m3 | NIOSH REL |
| | | TWA | 1,000 ppm 1,900 mg/m3 | OSHA Z-1 |
| | | TWA | 1,000 ppm 1,900 mg/m3 | OSHA P0 |

nexeo

solutions

| Version 1.3 | | | Revision Date: 08/28/2018 | |
|-----------------------------|---|---|---------------------------|-----------|
| | | STEL | 1,000 ppm | ACGIH |
| rsonal protective equipment | | | | |
| Respiratory protection | : | No personal respiratory pro quired. | tective equipment nor | mally re- |
| nd protection | | | | |
| Remarks | : | The suitability for a specific with the producers of the pr | | discussed |
| Eye protection | : | Eye wash bottle with pure w Tightly fitting safety goggles | | |
| Skin and body protection | : | Impervious clothing Choose body protection act tration of the dangerous sul | - | |
| Hygiene measures | : | Wash hands before breaks | and at the end of wor | kday. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : liquid | |
|---|------------------------------------|---|
| Colour | : colourless | |
| Odour | : alcohol-like, sweet | |
| Odour Threshold | : No data available | |
| рН | : No data available | |
| Freezing Point (Melting point/range) | : -114.1 °C (-173.4 °F) | |
| Boiling Point (Boiling point/boiling range) | : 79 °C (174 °F) (1013 hPa) | |
| Flash point | : 12 °C (54 °F) | |
| Evaporation rate | : 1 50-150-0 | |
| Flammability (solid, gas) | Ethyl Ether : No data available | |
| Upper explosion limit | : 19 %(V) | |
| | | |
| Lower explosion limit | : 3.3 %(V) | |
| Vapour pressure | : 60 hPa @ 20 °C (68 °F) | |
| Relative vapour density | : 1.6 | 6 |
| | | |

nexeo solutions

Safety Data Sheet Ethanol SDA 40B 190 Proof

Version 1.3

Revision Date: 08/28/2018

| Relative density | : 0.789 @ 20 °C (68 °F) | |
|--|-------------------------------|--|
| Density | : 0.816 g/cm3 @ 20 °C (68 °F) | |
| Solubility(ies) Water solubility | : completely soluble | |
| Solubility in other solvents | : No data available | |
| Partition coefficient: n- octanol/water | : No data available | |
| Auto-ignition temperature | : No data available | |
| Thermal decomposition | : No data available | |
| Viscosity Viscosity, dynamic | : 1.2 mPa.s | |
| | | |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity | No dangerous reaction known under conditions of normal u | se. |
|---|---|-----|
| Chemical stability | Stable under normal conditions. | |
| Possibility of hazardous reac- tions | No hazards to be specially mentioned. | |
| Conditions to avoid | Extremes of temperature and direct sunlight. | |
| | Heat, flames and sparks. | |
| Incompatible materials | Alkali metals Ammonia Oxidizing agents peroxides | |

SECTION 11. TOXICOLOGICAL INFORMATION

| Acute toxicity | |
|---------------------------------|--|
| Product: Acute oral toxicity | : Acute toxicity estimate: > 5,000 mg/kg |
| Serious eye damage/eye irri | tation |
| Components: | |
| | |

NeXeo

solutions

| ersion 1.3 | Revision Date: 08/28/2018 |
|---|---|
| 64-17-5: Species: Rabbit Result: Irritating to eyes. | |
| Carcinogenicity | |
| 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. |
| 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 anticipated carcinogen by NTP. |

Product: Remarks: Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

| Ecotoxicity | |
|----------------------------------|--|
| No data available | |
| Persistence and degradability | , |
| No data available | |
| Bioaccumulative potential | |
| No data available | |
| | |
| Mobility in soil | |
| No data available | |
| | |
| Other adverse effects | |
| Product: | |
| Ozone-Depletion Potential | : Regulation: 40 CFR Protection of Environment; Part 82 Pro- |
| | tection of Stratospheric Ozone - CAA Section 602 Class I Substances |
| | Remarks: This product neither contains, nor was manufac- |
| | tured 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). |
| Additional ecological infor- | : No data available |
| mation | |
| | |



Version 1.3

Revision Date: 08/28/2018

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 - including disposal, recycling and waste stream reduction, contact NEXEO's Environmental Services Group at 800-637-7922. |
| 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

DOT (Department of Transportation): UN1170, ETHANOL, 3, II

IATA (International Air Transport Association): UN1170, ETHANOL, 3, II

IMDG (International Maritime Dangerous Goods): UN1170, ETHANOL, 3, II, Flash Point:12 °C(54 °F)

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : B2: Flammable liquid D2B: Toxic Material Causing Other Toxic Effects

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

CERCLA Reportable Quantity

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

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

| SARA 311/312 Hazards | Flammable (gases, aerosols, liquids, or solids) Serious eye damage or eye irritation Specific target organ toxicity (single or repeated exposure) |
|----------------------|---|
| SARA 302 | : No chemicals in this material are subject to the reporting re- quirements of SARA Title III, Section 302. |

solutions

| Version 1.3 | Revision Date: 08/28/2018 |
|---------------|---|
| 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. |
| Clean Air Act | |

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (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):

| 64-17-5 | Ethanol |
|---------|--------------------|
| 75-65-0 | Tert-butyl alcohol |

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

| 64-17-5 | Ethanol |
|---------|--------------|
| 75-07-0 | Acetaldehvde |

Pennsylvania Right To Know

| 64-17-5 | Ethanol |
|-----------|--------------------|
| 7732-18-5 | Water |
| 75-07-0 | Acetaldehyde |
| 75-65-0 | Tert-butyl alcohol |

California Prop 65

WARNING: This product can expose you to chemicals including Acetaldehyde, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

| CH INV | : The formulation contains substances listed on the Swiss In ventory |
|--------|---|
| TSCA | : On TSCA Inventory |
| DSL | : All components of this product are on the Canadian DSL |
| AICS | : On the inventory, or in compliance with the inventory |
| NZIoC | : On the inventory, or in compliance with the inventory |
| ENCS | : Not in compliance with the inventory |
| ISHL | : On the inventory, or in compliance with the inventory |

solutions

| Version 1.3 | Revision Date: 08/28/2018 |
|-------------|---|
| KECI | : On the inventory, or in compliance with the inventory |
| PICCS | : On the inventory, or in compliance with the inventory |
| IECSC | : On the inventory, or in compliance with the inventory |

SECTION16. OTHER 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. This MSDS has been prepared by NEXEO™ Solutions EHS Product Safety Department (1-855-429-2661) MSDS@nexeosolutions.com.

| Revision | Date | : | 08/28/2018 |
|----------|------|---|------------|
|----------|------|---|------------|

Legacy SDS: R0096856

Material number:

16053381, 670822, 604577, 603387, 206301, 161016, 160045, 99402, 114523, 66641, 160482, 131688

| Key or leg | gend to abbreviations and acronym | s used in the | e safety data sheet |
|------------|--|---------------|--|
| ACGIH | American Conference of Gov- ernment Industrial Hygienists | LD50 | Lethal Dose 50% |
| AICS | Australia, Inventory of Chemical Substances | LOAEL | Lowest Observed Adverse Effect Level |
| DSL | Canada, Domestic Substances List | NFPA | National Fire Protection Agency |
| NDSL | Canada, Non-Domestic Sub- stances List | NIOSH | National Institute for Occupational Safety & Health |
| CNS | Central Nervous System | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service | NZIOC | New Zealand Inventory of Chemicals |

SDS Number: 100000010156



Version 1.3

Revision Date: 08/28/2018

N

| EC50 | Effective Concentration | NOAEL | No Observable Adverse Effect Level |
|---|---|-------------|--|
| EC50 | Effective Concentration 50% | NOEC | No Observed Effect Concentration |
| EGEST EOSCA Generic Exposure Sce- nario Tool | | OSHA | Occupational Safety & Health Administra- tion |
| EOSCA | SCA European Oilfield Specialty Chemicals Association | | Permissible Exposure Limit |
| EINECS | European Inventory of Existing Chemical Substances | PICCS | Philippines Inventory of Commercial Chemical Substances |
| MAK Germany Maximum Concentra- tion 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 Reauthori- zation Act. |
| IARC | International Agency for Research on Cancer | TLV | Threshold Limit Value |
| IECSC | Inventory of Existing Chemical Substances in China | TWA | Time Weighted Average |
| ENCS | Japan, Inventory of Existing and New Chemical Substances | TSCA | Toxic Substance Control Act |
| KECI | Korea, Existing Chemical Invento- ry | UVCB | Unknown or Variable Composition, Com- plex Reaction Products, and Biological Materials |
| <= | Less Than or Equal To | WHMIS | Workplace Hazardous Materials Infor- mation System |
| LC50 | | Lethal Conc | entration 50% |