

## March 2022 Combined SDS for -\#7 Shuffie Alley

pages 2-7-Bunge Corn Meal
pages 8-21-StatiKil - updated May 2019 (trace amounts)
pages 22-28- Mineral Spirits - updated Nov 2021 (trace amounts)
While nuts are not an ingredient, this product is prepared in a facility and on machinery that has contact with nut products and should not be considered nut-free.

Safety Data Sheet

## * * * Section 1 - Product and Company Identification <br> ```* * *```

Material Name: Dry Milled corn products - grits, meals, flours, brans, whole grain. Includes non-gmo, organic and transitional versions.

Synonyms/Other Common Names: Corn Grits, Flaking Grits, Brewers Grits, Cornmeal, Corn Flour, Corn Germ, Hominy Feed, Pregelatinized Corn Product, Pregelatinized Corn Flour, Ceratex, Arepa, Snack Meal, Whole Grain Cornmeal, Whole Grain Corn Flour, ARP25, BCF320, BCM260E, BPSY400, CC401, CC401E, CC402, CC402E, CC403, CC404, CCF600, CCF600E, CCF602, CCF604, CCF604E, CCF607, CCF609, CCF610, CCF610E, CCF610P, CCF611,CCF611E, CCF615, CCF620, CCF650, CCF675, CCG012, CCG040, CCG040-R, CCG040E, CCG045, CCG050, CCG060, CCG070, CCG080, CCM250, CCM250E, CCM254, CCM254E, CCM255, CCM255E, CCM260, CCM260E, CGM100, CJRG070, CRF100, FCG165, FCG165E, FCG201, FCG202, FCM350, FCM350GBF, FCM350E, FCM355, FCM355E, MCF720, MCF750, MCF780, MCF800, MCG100, MCG115, MCG120, MCG122, WCC401, WCCF609, WCCF611, WCCF611E, WCCG040, WCCG040E, WCCM250, WCCM254, WCCM254E, WFCG155E, WFCG165, WFCG165E, WFCM350, WMCG100, WMCG105, WMCG120, MF04060, NC02080, ND06065, NF10085, NGFM020, NM02065, NM04085, NU20065, NU20085, RM04085, WNC02080, PGF1000, PCF1000, Allbond, USG15, USG95, PCF700, PCPF400, PCM254, PCM254E, PCF700, YPCF900, FEF040, FF025, FM020, FR020, PCF600, PCM254, WFF025, WFR020, WPCF600, WPCM254, WPCM254E, WPM350, PCM254E, FC080, ARP 254, ARP254E, WARP254, WARP254E, OCC401, OCCF604,OCCG040, OCCG050, OCCG012, OCCM250, OFCG165, OFCG202, OYCM200, OCCF600, OCCM254, OYCM205, OYCM315, OADOMHF, OMF04060, YCM205, YCM260, YCM300, YCM315, YPCF800, YPCF900, Toasted Corn Germ, NGCC401, NGCC402, NGCCF600, NGCCF607, NGCCF609, NGCCF610P, NGCCG012, NGCCG040, NGCCM254, NGCCM260, NGFCG165, NGFCM350, NGYCM315, NGYCM300, TFCM355, TMF04060, TYCM315, TGRM100, PPM200, PPM355, PPG120, PPG150, NGMF04060, TDCG250 Recommended Use \& Restrictions: Products listed are sold as food ingredient or feed materials.

Manufacturer Information:

Bunge North America
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

Phone: 800-528-4633 between 8:00 AM - 5:00 PM Central Time Fax: 314-292-2333

Emergency Information:
In the event of an Emergency, contact Chemtrec at 1-800-262-8200

*     *         * Section 2 - Hazard(s) Identification

Hazard classification: Combustible dust / Respiratory hazard if small particles are generated during further processing, handling or other means.

Hazard Statement(s): Mildly irritating to the eyes (Class 2B eye irritant). May cause breathing difficulties if inhaled. If small particles are generated during further processing, handling, or other means, may form combustible dust concentrations in air.

## Potential Health Effects:

Eyes - Dust may be a mechanical eye irritant.
Skin - Sensitive individuals may experience irritation.
Inhalation - Excessive inhalation may affect nose, throat or lungs. Avoid breathing dust.
Ingestion - None anticipated under anticipated use conditions. Sensitive individuals may experience an allergenic response.

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Carcinogenicity and Reproductive Hazard: Based on available data no evidence of carcinogenicity or reproductive toxicity.
Medical Conditions aggravated by exposure to product: No data available
Physical Hazards: None expected under normal conditions
Other Hazards (not otherwise classified): Milled grain products are not generally considered hazardous, but dust generated through downstream activities

Label Elements: Food product subject to FDA/USDA labeling and exempt from GHS labeling

## * * * Section 3 - Composition / Information on Ingredients

| CAS \# | Component (Chemical Name \& Common Name) | Concentration |
| :--- | :--- | :--- |
| Not available | Milled corn products | Up to 100\% |
|  | Milled corn product dust | $\mathbf{0 - 5 \%}$ |

## Safety Data Sheet

## * * * Section 4 - First Aid Measures * * *

First Aid: Eyes If necessary, rinse eyes with water for 15 minutes. Remove contact lenses if applicable. Seek medical attention as needed.

First Aid: Skin - Wash with soap and water
First Aid: Ingestion - None
First Aid: Inhalation - Remove to fresh air. Seek medical attention for any breathing difficulty
Most important symptoms/effects (acute \& delayed):
Eyes - Dust from particulates may be mildly irritating to the eyes
Skin - May cause irritation in sensitive individuals
Inhalation - Excessive inhalation may affect nose, throat and lungs. Allergies and respiratory ailments may be aggravated by exposure.
Ingestion: None expected under anticipated use conditions. May cause irritation to sensitive individuals.

## * * * Section 5 - Fire Fighting Measures

## Extinguishing Media (suitable \& unsuitable)

Foam, $\mathrm{CO}_{2}$, water fog or dry chemical. Do not use a direct stream if dust is formed. Dust dispersed by direct stream in the presence of an ignition source could explode.

## Hazardous Combustion Products

Oxides of carbon

## Special Fire Fighting Equipment/Protective Equipment/Precautions

Product alone is not explosive. If fine grain dust is dispersed in air at sufficient concentration it may ignite if exposed to an ignition source. Firefighters should wear full protective gear.

## * * * Section 6 - Accidental Release Measures

Personal Precautions / Protective Equipment / Evacuation \& Emergency Procedure: Methods and Material for Containment and Clean-up: Clean up with a soft bristle broom(s) or vacuum approved for a Class II hazardous location. Dust deposits should be maintained to a minimum on surfaces as these could form explosive mixture if they are dispersed in sufficient concentration. Avoid dispersal of dust in the air (i.e., cleaning dust surfaces with compressed air in the presence of an ignition source should not be allowed). Dispose of in accordance with local, State and Federal regulations.

## *** Section 7 - Handling and Storage

Safe Handling Procedures \& Safe Storage Procedures (including incompatibilities): Fine dust dispersed in air at a sufficient concentration may ignite if exposed to an ignition source. Remove grain dust from area / processing equipment prior to using any heat producing equipment such as arc welders, torches and spark / heat producing tools, such as surface grinders. According to 29 CFR 1910.272(f) a hot work permit is required.

## Safety Data Sheet

| $* *$ Section 8-Exposure Controls / Personal Protection * * * |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Exposure Limits | ACGIH (TWA \& Ceiling) | OSHA (PEL) | Other |  |
| Chemical | $10 \mathrm{mg} / \mathrm{M}^{3}$ | $15 \mathrm{mg} / \mathrm{M}^{3}$ (Total) |  |  |
| Corn Milled Product Dust |  | $5 \mathrm{mg} / \mathrm{M}^{3}$ (Respirable) |  |  |

## Engineering Controls

Ventilation: Local exhaust if needed.
Mechanical (General): If needed, ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent escape of dust into the work area. Use only appropriately classified electrical equipment and powered industrial trucks.

Personal Protective Equipment:
Eyes/Face - Safety glasses / goggles suggested if eye contact is possible
Skin/Hands - Typically not necessary. Gloves may be worn if needed.
Respiratory - Wear an approved NIOSH dust respirator whenever dust concentrations in the work area are above ACGIH TLV / OSHA PEL

Work / Hygienic Practices: Good personal hygiene practices should be followed. Avoid excessive dust accumulations and control ignition sources. Where appropriate, employ grounding, venting and explosion relief in accordance with accepted practices in processes capable of generating dust and/or static electricity.

## * * * Section 9 - Physical \& Chemical Properties

Appearance: Products will be yellow or white granular materials - Dust will be fine particulates.
Odor: Typical of milled corn
Odor Threshold: ND
pH: ND
Melting Point/Freezing Point: NA
Initial Boiling Point and Boiling Range: NA
Flash point: NA
Evaporation Rate: NA
Flammability (solid/gas): ND
Upper/Lower Flammability/Explosive Limits (UFL/LFL): See below
Vapor Pressure: NA
Vapor Density: NA
Relative Density: NA
Solubility(ies): Approx. 1\%
Partition Coefficient (n-octanol/water): ND
Auto-ignition temperature: ND
Decomposition temperature: ND
Viscosity: NA
Upper/Lower flammability or explosive limits: When dispersed into the air in sufficient concentrations, grain dust can explode in the presence of an ignition source. Do not allow dust to become dispersed in the air even by the extinguishing agent. Minimum explosive concentration (MEC) is generally $>50 \mathrm{~g} / \mathrm{m} 3$. However, moisture content, particle size, caloric properties and specific ingredients also affect the explosiveness of grain dust. For an explosion to occur four conditions must exist:
First - Oxygen (air) must be present
Second - There must be an ignition source (e.g., open flame, electrical short, sparks, etc.)
Third - There must be fuel (e.g., grain dust in suspension)
Fourth - There must be containment of suspended grain dust (e.g., in a silo, filtration system)
Although an explosion will not occur if there is no containment, the dust can still ignite resulting in a fire.

## Safety Data Sheet

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## *** Section 11 - Toxicological Information ***

Likely routes of exposure (inhalation, ingestion, skin and eye contact) \& description of symptoms:
Eyes: May be a mechanical irritant
Skin: May be a mechanical irritant
Inhalation: Acute excessive inhalation of grain dusts may affect the nose, throat and lungs. Repeated and prolonged exposure to grain dusts may affect the respiratory system or cause sensitization. Smokers are at increased risk of respiratory effects. Allergies and respiratory ailments may be aggravated by exposure.

Ingestion: None anticipated under normal use conditions. May cause irritation to sensitive individuals Airborne dust may be generated during handling which may be irritating to eyes and respiratory system.

Description of immediate, delayed or chronic effects from short or long-term exposure: None determined Acute toxicity: Based on available data, no evidence of acute toxicity.

Numerical measures of toxicity (LD 50/LC50): No LD50/LC50 data are available for these products
Listed in NTP report on Carcinogens, or identified as potential carcinogen by IARC or OSHA: No

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\text { * * * Section } 12 \text { - Ecological Information * * * (non-mandatory) }
$$

A: General Product Information: No information available for these products
B: Component Analysis - Ecotoxicity - Aquatic Toxicity: No data available
*** Section 13 - Disposal Considerations * * (non-mandatory)
US EPA Waste Number \& Descriptions
Disposal Instructions
All wastes must be handled in accordance with local, state and federal regulations.
See Section 7 for Handling Precautions. See Section 8 for Personal Protective Equipment recommendations May be composted
*** Section 14 - Transportation Information *** (non-mandatory)
UN Number:
UN proper shipping name:
Transport hazard classes:
Packing group number:
Environmental hazards (e.g., marine pollutant)
Bulk transport guidance:
Other special precautions:

## Safety Data Sheet

| **** Section 15-Regulatory Information *** (non-mandatory) |
| :--- |
| US Federal Regulations (EPA, DOT, OSHA, CPSC) |
| All electrical equipment must be suitable for use in hazardous atmospheres involving combustible dust in accordance with 29 CFR |
| 1910.307. The National Electrical Code, NFPA 70, contains guidelines for determining the type and design of equipment and |
| installation which will meet this requirement. |
| Combustible Dust is a "Hazard, other than Chemical" as defined by the OSHA hazard communication standard 29 CFR 1910.1200 |

State/Provincial Regulations: None of these products components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

## Additional Regulatory Information

## *** Section 16 - Other Information ***

## Other Information

This Safety Data Sheet covers milled grain products in their normal state and does not include any chemicals that may be applied by subsequent handlers and/or distributors of the products.

Bunge believes, to the best of its knowledge, that the information contained herein is accurate as of the date hereof. However, as the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. MOREOVER, NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREIN AS TO THE INFORMATION PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. The health and safety precautions contained herein may not be adequate for all individuals and/or all situations. It is the user's obligation to evaluate and use this product safely. Users should satisfy themselves that they have all current data relevant to their particular use and that their activities comply with all applicable laws.

## Key/Legend

NA - Not Applicable
ND - Not Determined
ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
TLV - Threshold Limit Value
PEL - Permissible Exposure Limit
TWA - Time Weighted Average
STEL - Short Term Exposure Limit
NTP - National Toxicology Program
IARC - International Agency for Research on Cancer
MEC - Minimum Explosive Concentration

Revision Date: 5/29/2015, 1.0000 - initial version
Revision Date: 7/22/2015, 1.0001 - added USG15
Revision Date: 8/3/2015, 1.0002 - added OCCM254
Revision Date: 9/14/2015, 1.0003 - added Toasted Corn Germ
Revision Date: 2/7/2016, 1.0004 - added 13 Non-GMO products
Revision Date: 5/2/2016, 1.0005 - added NGYCM300
Revision Date: 8/25/2017, 1.0006 - added transitional and OMF04060. Expanded description.
Revision Date: 10/23/2018, 1.0007 - added CRF100
Revision Date: 2/21/2019, 1.0008 - added NGFM020
Revision Date: 5/30/2019, 1.0009 - added BPSY400
Revision Date: 7/27/2020, 1.0010 - added popcorn products
Revision Date: 8/17/2020, 1.0011 - added NGMF04060 non-gmo dietfiber corn bran, medium
Revision Date: 12/14/2020, 1.0012 - added TDCG250 Corn Germ-Dark Toasted

## SAFETY DATA SHEET <br> C27376000

## Section 1. Identification

| Product name | STATIKIL® Statik Neutralizer |
| :---: | :---: |
| Product code | C27376000 |
| Other means of identification | Not available. |
| Product type | : Aerosol. |
| Relevant identified uses of the substance or mixture and use |  |
| Not applicable. |  |
| Manufacturer | Mfd. for STATIKIL INC. 5186 New Haven Circle Barberton, Ohio 44203 |
| Emergency telephone number of the company | : 216-566-2917 |
| Product Information Telephone Number | : 330-564-4000 |
| Regulatory Information Telephone Number | : 216-566-2902 |
| Transportation Emergency Telephone Number | : 800-424-9300 |

## Section 2. Hazards identification

OSHA/HCS status
Classification of the
substance or mixture
GHS label elements
Hazard pictograms

Signal word
Hazard statements
: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
: FLAMMABLE AEROSOLS - Category 1
GASES UNDER PRESSURE - Compressed gas
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
TOXIC TO REPRODUCTION (Fertility) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: $\mathbf{2 4 . 5 \%}$
:

: Danger
Extremely flammable aerosol.
Contains gas under pressure; may explode if heated.
Causes serious eye irritation.
Causes skin irritation.
Suspected of damaging fertility.
May be fatal if swallowed and enters airways.
May cause respiratory irritation.
May cause drowsiness and dizziness.

| Date of issue/Date of revision | $: 5 / 21 / 2019$. | Date of previous issue | No previous validation. Version $: 1 / 14$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Section 2. Hazards identification

May cause damage to organs through prolonged or repeated exposure.

## Precautionary statements General

Prevention

Response

Storage

Disposal

Supplemental label elements

Hazards not otherwise classified
: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling.
: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
: Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 ${ }^{\circ} \mathrm{C} / 122{ }^{\circ} \mathrm{F}$. Store in a well-ventilated place.
Dispose of contents and container in accordance with all local, regional, national and international regulations.
DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
Please refer to the SDS for additional information. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.
: None known.

## Section 3. Composition/information on ingredients

| Substance/mixture | $:$ Mixture |
| :--- | :--- |
| Other means of <br> identification | $:$ Not available. |

CAS numberlother identifiers

| Ingredient name | $\%$ by weight | CAS number |
| :--- | :--- | :--- |
| 2-Propanol | 50.0 | $67-63-0$ |
| Methyl Acetate | 15.3 | $79-20-9$ |
| Propane | 13.0 | $74-98-6$ |
| Hexane | 8.9 | $110-54-3$ |
| 2-Methylpentane | 4.1 | $107-83-5$ |
| 3-Methylpentane | 1.5 | $96-14-0$ |
| 2,3-Dimethylbutane | 1.3 | $79-29-8$ |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

| Date of issue/Date of revision | $: 5 / 21 / 2019$. | Date of previous issue $\quad$ No previous validation. Version $: 1 \quad 2 / 14$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Section 4. First aid measures

## Description of necessary first aid measures

| Eye contact | : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. |
| :---: | :---: |
| Inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Skin contact | : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Ingestion | : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |

## Most important symptoms/effects, acute and delayed

 Potential acute health effects| Eye contact | $:$ Causes serious eye irritation. |
| :--- | :--- |
| Inhalation | : Can cause central nervous system (CNS) depression. May cause drowsiness and |
|  | dizziness. May cause respiratory irritation. |
| Skin contact | $:$ Causes skin irritation. |
| Ingestion | : Can cause central nervous system (CNS) depression. May be fatal if swallowed and |
|  | enters airways. Irritating to mouth, throat and stomach. |

## Over-exposure sians/symptoms

| Eye contact | Adverse symptoms may include the following: pain or irritation <br> watering <br> redness |
| :---: | :---: |
| Inhalation | Adverse symptoms may include the following: respiratory tract irritation coughing <br> nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations |
| Skin contact | Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations |

## Section 4. First aid measures

| Ingestion | : Adverse symptoms may include the following: <br> nausea or vomiting <br> reduced fetal weight <br> increase in fetal deaths <br> skeletal malformations |
| :--- | :--- |
| Indication of immediate medical attention and special treatment, needed, if necessary |  |

## See toxicological information (Section 11)

## Section 5. Fire-fighting measures

## Extinguishing media

Suitable extinguishing media
Unsuitable extinguishing : None known. media

Specific hazards arising from the chemical

Hazardous thermal decomposition products

Special protective actions for fire-fighters

Special protective equipment for fire-fighters
carbon dioxide carbon monoxide
: Use an extinguishing agent suitable for the surrounding fire.
: Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
: Decomposition products may include the following materials:
: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
For non-emergency : No action shall be taken involving any personal risk or without suitable training. personnel Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

| Date of issue/Date of revision | $: 5 / 21 / 2019$ | Date of previous issue | No previous validation. Version $: 1 / 14$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Section 6. Accidental release measures

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

Environmental precautions
: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Small spill

Large spill
: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

## Precautions for safe handling

Advice on general occupational hygiene
: Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding $50^{\circ} \mathrm{C}$. Do not pierce or burn, even after use. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool including any
incompatibilities
and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

## Control parameters

Occupational exposure limits

## Section 8. Exposure controls/personal protection



## Section 8. Exposure controls/personal protection

| 2,3-Dimethylbutane | CEIL: $1800 \mathrm{mg} / \mathrm{m}^{3} 15$ minutes. |
| :--- | :--- |
|  | ACGIH TLV (United States, 4/2014). |
|  | TWA: 500 ppm 8 hours. |
|  | TWA: $1760 \mathrm{mg} / \mathrm{m}^{3} 8$ hours. |
|  | STEL: 1000 ppm 15 minutes. |
|  | STEL: $3500 \mathrm{mg} / \mathrm{m}^{3} 15$ minutes. |
|  | NIOSH REL (United States, 10/2013). |
|  | TWA: 100 ppm 10 hours. |
|  | TWA: $350 \mathrm{mg} / \mathrm{m}^{3} 10$ hours. |
|  | CEIL: 510 ppm 15 minutes. |
|  | CEIL: $1800 \mathrm{mg} / \mathrm{m}^{3} 15$ minutes. |

## Appropriate engineering controls

## Environmental exposure controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Skin protection

 Hand protectionBody protection

Other skin protection

Respiratory protection
: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

## Appearance

| Physical state | : Liquid. |
| :---: | :---: |
| Color | : Not available. |
| Odor | : Not available. |
| Odor threshold | : Not available. |
| pH | : Not available. |
| Melting point | : Not available. |
| Boiling point | Not available. |
| Flash point | : Closed cup: $-29^{\circ} \mathrm{C}\left(-20.2^{\circ} \mathrm{F}\right)$ [Pensky-Martens Closed Cup] |
| Evaporation rate | : 9.1 (butyl acetate = 1) |
| Flammability (solid, gas) | : Not available. |
| Lower and upper explosive (flammable) limits | Lower: 1\% <br> Upper: 16\% |
| Vapor pressure | : $13.5 \mathrm{kPa}(101.325 \mathrm{~mm} \mathrm{Hg})$ [at $20^{\circ} \mathrm{C}$ ] |
| Vapor density | : 1.55 [Air = 1] |
| Relative density | : 0.73 |
| Solubility | : Not available. |
| Partition coefficient: n octanol/water | : Not available. |
| Auto-ignition temperature | : Not available. |
| Decomposition temperature | : Not available. |
| Viscosity | Kinematic (room temperature): $<0.205 \mathrm{~cm}^{2} / \mathrm{s}$ ( $<20.5 \mathrm{cSt}$ ) Kinematic ( $40^{\circ} \mathrm{C}\left(104^{\circ} \mathrm{F}\right.$ )): $<0.205 \mathrm{~cm}^{2} / \mathrm{s}(<20.5 \mathrm{cSt})$ |
| Aerosol product |  |
| Type of aerosol | Spray |
| Heat of combustion | : 0.00003571 kJ/g |

## Section 10. Stability and reactivity

Reactivity
Chemical stability : The product is stable.

Possibility of hazardous reactions

| Conditions to avoid | : Avoid all possible sources of ignition (spark or flame). |
| :--- | :--- |
| Incompatible materials | $:$ No specific data. |

Hazardous decomposition products

No specific test data related to reactivity available for this product or its ingredients.
: Under normal conditions of storage and use, hazardous reactions will not occur.

No specific data. not be produced.
: Under normal conditions of storage and use, hazardous decomposition products should

## Section 11. Toxicological information

## Information on toxicological effects.

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
| :--- | :--- | :--- | :--- | :--- |
| 2-Propanol | LD50 Dermal | Rabbit | $12800 \mathrm{mg} / \mathrm{kg}$ | - |
|  | LD50 Oral | Rat | $5000 \mathrm{mg} / \mathrm{kg}$ | - |
| Methyl Acetate | LD50 Dermal | Rabbit | $>5 \mathrm{~g} / \mathrm{kg}$ | - |
| Hexane | LD50 Oral | Rat | $>5 \mathrm{~g} / \mathrm{kg}$ | - |
|  | LC50 Inhalation Gas. | Rat | 48000 ppm | 4 hours |
|  | LD50 Oral | Rat | $15840 \mathrm{mg} / \mathrm{kg}$ | - |

## Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Propanol | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 milligrams | - |
|  | Eyes - Moderate irritant | Rabbit | - | 10 milligrams | - |
|  | Eyes - Severe irritant | Rabbit | - | $\begin{aligned} & 100 \\ & \text { milligrams } \end{aligned}$ | - |
|  | Skin - Mild irritant | Rabbit | - | 500 milligrams | - |
| Methyl Acetate | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 milligrams | - |
|  | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
|  | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| Hexane | Eyes - Mild irritant | Rabbit | - | 10 milligrams | - |

Sensitization
Not available.
Mutagenicity
Not available.
Carcinogenicity
Not available.

## Classification

| Productingredient name | OSHA | IARC | NTP |
| :--- | :--- | :--- | :--- |
| 2-Propanol | - | 3 | - |

Reproductive toxicity
Not available.

## Teratogenicity

Not available.

## Specific taraet organ toxicitv (single exposure)

| Name | Category | Route of <br> exposure | Target organs |
| :--- | :--- | :--- | :--- |
| 2-Propanol | Category 3 | Not applicable. | Respiratory tract <br> irritation and <br> Narcotic effects <br> Respiratory tract <br> irritation and <br> Narcotic effects <br> Respiratory tract <br> irritation and |
| Hexane | Category 3 | Not applicable. |  |
| Category 3 Not applicable. |  |  |  |

## Section 11. Toxicological information

|  |  |  | Narcotic effects |
| :---: | :---: | :---: | :---: |
| 2-Methylpentane | Category 3 | Not applicable. | Respiratory tract rritation and |
|  |  |  | Narcotic effects |
| 3-Methylpentane | Category 3 | Not applicable. | Respiratory tract rritation and |
| 2,3-Dimethylbutane | Category 3 | Not applicable. | Respiratory tract irritation and Narcotic effects |

Specific taraet oragn toxicitv (repeated exposure)

| Name | Category | Route of <br> exposure | Target organs |
| :--- | :--- | :--- | :--- |
| 2-Propanol |  |  |  |
| Propane | Category 2 | Not determined | Not determined |
| Hexane | Category 2 | Not determined | Not determined |
| 2-Methylpentane | Category 2 | Not determined | Not determined |
| 3-Methylpentane | Category 2 | Not determined | Not determined |
| 2,3-Dimethylbutane | Category 2 | Not determined | Not determined |
| Category 2 | Not determined | Not determined |  |

## Aspiration hazard

| Name | Result |
| :--- | :--- |
| Propane | ASPIRATION HAZARD - Category 1 |
| Hexane | ASPIRATION HAZARD - Category 1 |
| 2-Methylpentane | ASPIRATION HAZARD - Category 1 |
| 3-Methylpentane | ASPIRATION HAZARD - Category 1 |
| $2,3-$ Dimethylbutane | ASPIRATION HAZARD - Category 1 |


| Information on the likely routes of exposure | Not available. |
| :---: | :---: |
| Potential acute health effects |  |
| Eye contact | : Causes serious eye irritation. |
| Inhalation | ; Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. |
| Skin contact | : Causes skin irritation. |
| Ingestion | : Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach. |
| Symptoms related to the physical, chemical and toxicological characteristicss |  |
| Eye contact | : Adverse symptoms may include the following: pain or irritation <br> watering <br> redness |
| Inhalation | : Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations |


| Pate of issue/Date of revision | $: 5 / 21 / 2019$. | Date of previous issue $\quad$ No previous validation. Version $: 10 / 14$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |



## Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
| :--- | :--- | :--- | :--- |
| 2-Propanol | Acute LC50 $1400000 \mu \mathrm{~g} / \mathrm{I}$ Marine water | Crustaceans - Crangon crangon | 48 hours |
|  | Acute LC50 4200 mg/l Fresh water | Fish - Rasbora heteromorpha | 96 hours |
| Methyl Acetate | Acute LC50 $320000 \mu \mathrm{~g} / \mathrm{Fresh}$ water | Fish - Pimephales promelas | 96 hours |
| Hexane | Acute LC50 $2500 \mu \mathrm{~g} / \mathrm{Fresh}$ water | Fish - Pimephales promelas | 96 hours |

Persistence and dearadability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
| :--- | :--- | :--- | :--- |
| 2-Propanol | - | - | Readily |

Bioaccumulative potential
Date of issue/Date of revision $\quad: 5 / 21 / 2019 \quad$ Date of previous issue $\quad$ No previous validation. Version $: 1$

## Section 12. Ecological information

| Product/ingredient name | LogPow | BCF | Potential |
| :--- | :--- | :--- | :--- |
| Hexane | - | 501.187 | high |

## Mobility in soil

Soil/water partition : Not available.
coefficient (Koc)

Other adverse effects
: No known significant effects or critical hazards.

## Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

## Section 14. Transport information

|  | DOT Classification | TDG Classification | Mexico Classification | IATA | IMDG |
| :---: | :---: | :---: | :---: | :---: | :---: |
| UN number | UN1950 | UN1950 | UN1950 | UN1950 | UN1950 |
| UN proper shipping name | AEROSOLS | AEROSOLS | AEROSOLS | AEROSOLS, flammable | AEROSOLS |
| Transport hazard class(es) | $2.1$ | $2.1$ | $2.1$ | $2.1$ | $2.1$ |
| Packing group | - | - | - | - | - |
| Environmental hazards | No. | No. | No. | No. | No. |
| Additional information | Special. provisions LIMITED QUANTITY | Special provisions LIMITED QUANTITY | Special provisions <br> (ERG\#126) | Special provisions LIMITED QUANTITY | Emergency schedules (EmS) LIMITED QUANTITY, F-D, S-U |

Special precautions for user :

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

## Section 14. Transport information

Transport in bulk according : Not available.
to Annex II of MARPOL
73/78 and the IBC Code

## Section 15. Regulatory information

## U.S. Federal regulations

## State regulations

California Prop, 65
WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## Section 16. Other information

## Hazardous Material Information System (U.S.A.)

| Health | $*$ |
| :--- | :--- |
| Flammability | 4 |
| Physical hazards | 0 |
|  |  |

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS $®$ is a registered mark of the National Paint \& Coatings Association (NPCA). HMIS $®$ materials may be purchased exclusively from J. J. Keller (800) 327-6868.
The customer is responsible for determining the PPE code for this material.

## Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyerluser should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

| Date of issue/Date of revision | $: 5 / 21 / 2019$. | Date of previous issue | $:$ No previous validation. | Version $: 1$ | $13 / 14$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 1. PRODUCT AND COMPANY IDENTIFICATION



## SAFETY DATA SHEET

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

Potential Health Effects (Acute and Chronic):

Acute health effects
Eye contact: No known significant effects or critical hazards.
Inhalation: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact: Causes skin irritation. Defatting to the skin.
Ingestion: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Medical Conditions Generally None known. Aggravated By Exposure:

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS \# | Hazardous Components (Chemical Name) | Concentration |
| :---: | :--- | :--- |
| $64742-47-8$ | Hydrotreated light distillate (petroleum, mineral | $100.0 \%$ |
|  | spirits) |  |

## 4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Inhalation:
If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be rendered.

Skin contact:
Wash with soap and large quantities of water for at least 15 minutes. Seek medical attention if irritation from contact persists.

Eye contact:
Immediately flush eyes with water, remove nay contact lens, continue flushing with water for at least 15 minutes. Get medical attention.

Ingestion:
Do not induce vomiting. Call your poison control center, hospital emergency room, or physician immediately.
Signs and Symptoms Of Exposure:
Note to Physician:

Primary routes of exposure:
Inhalation, ingestion, and dermal.
Call your local poison control center for further instructions.

## SAFETY DATA SHEET

## 5. FIRE FIGHTING MEASURES

Flammability Classification: NFPA Class II
Flash Pt: $\quad>105.80 \mathrm{~F}$ Method Used: TAG Closed Cup

Explosive Limits:
Autoignition Pt:
> 105.80 F Method Used: TAG Closed Cup
LEL: . 6 UEL: 5.5
456.80 F

Suitable Extinguishing Media:Use carbon dioxide, dry chemical powder, or foam.
Fire Fighting Instructions: Self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas. Storage containers exposed to fire should be kept cool with water spray to prevent pressure build-up. Stay away from heads of containers that have been exposed to intense heat or flame.
Flammable Properties and Hazards:
Hazardous Combustion No data available. Products:

No data available.

## 6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Released Or Spilled:

Clean-up:
Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Shut off ignition sources, keep flares, smoking or flames out of hazard area.

Small spills:
Take up the spilled liquid with sand, earth, or other noncombustible absorbent material and place in a plastic container where applicable.

Large spills:
Dike far ahead of spill for later disposal.

## 7. HANDLING AND STORAGE

 Handling:Precautions To Be Taken in Storing:

Precautions To Be Taken in Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse this container. Keep container tightly closed when not in use. Store in a cool, dry place. Do not store near flames or at elevated temperatures.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| CAS \# | Chemical Name | Jurisdiction | Recommended Exposure Limits | Notations |
| :--- | :--- | :--- | :--- | :--- |
| $64742-47-8$ | Hydrotreated light | ACGIH TLV | TLV: $200 \mathrm{mg} / \mathrm{m} 3$ |  |
| distillate (petroleum, mineral spirits) |  |  |  |  |


| Respiratory Equipment (Specify Type): | For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors. A dust mask does not provide protection against vapors. |
| :---: | :---: |
| Eye Protection: | Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury. Contact lenses should not be worn while working with chemicals. |
| Protective Gloves: | Wear impermeable gloves. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product. |
| Other Protective Clothing: | Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use. Discard any clothing or other protective equipment that cannot be decontaminated, such as gloves or shoes. |
| Engineering Controls (Ventilation etc.): | Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or you experience slight dizziness, headache, nausea, or eye-watering -- Stop -- ventilation is inadequate. Leave area immediately. |
| Work/Hygienic/Maintenance Practices: | A source of clean water should be available in the work area for flushing eyes and skin. Do not eat, drink, or smoke in the work area. Wash hands thoroughly after use. |
| 9. PHYSICAL AND CHEMICAL PROPERTIES |  |
| Physical States: | [ ] Gas [X]Liquid [ ] Solid |
| Appearance and Odor: | Colorless to light yellow |
|  | Solvent odor |
|  | Odor threshold not determined. |
| pH: | ND |
| Melting Point: | -72.40 F |
| Boiling Point: | 318.20 F-354.20 F |
| Flash Pt: | > 105.80 F Method Used: TAG Closed Cup |
| Evaporation Rate: | < 1 (BuAC=1) |
| Flammability (solid, gas): | No data available. |
| Explosive Limits: | LEL: . 6 UEL: 5.5 |
| Vapor Pressure (vs. Air or mm Hg ): | 3 MM HG at 25.0 C |
| Vapor Density (vs. Air = 1): | 4.5 Air $=1$ |
| Specific Gravity (Water = 1): | 0.78 |
| Density: | 6.5 |
| Solubility in Water: | Slight |
| Solubility Notes: | Very slightly soluble in the following materials: cold water. (1.5 g/l) |
| Saturated Vapor | ND | Concentration:

Octanol/Water Partition ND

## Coefficient:

Percent Volatile: $\quad 100.0$ \% by weight.
VOC / Volume:
Autoignition Pt:
780.0000 G/L

Decomposition Temperature: No data.
Viscosity: ND

Additional Physical Conductivity $=<5$ picosiemens/meter (unadditized)
Information
ND = Not Determined

## 10. STABILITY AND REACTIVITY

Stability: Unstable [ ] Stable [ X ]
Conditions To Avoid - Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, Instability:

Incompatibility - Materials To Incompatible with strong oxidizing agents.
Avoid:
Hazardous Decomposition or Thermal decomposition may produce carbon monoxide and carbon dioxide. Byproducts:
Possibility of Hazardous Will occur [ ] Will not occur [ X ]
Reactions:
Conditions To Avoid Hazardous Reactions:

| 11. TOXICOLOGICAL INFORMATION |  |
| :---: | :---: |
| Toxicological Information: | In animal studies utilizing mineral spirits containing up to $22 \%$ aromatics indicated that the acute central nervous system effects are reversible. Based on existing animal studies, the potential for persistent effects is not clear. |
| Irritation or Corrosion: | Primary dermal irritation studies (four hour exposure) in rabbits utilizing mineral spirits containing less than $2 \%$ aromatics resulted in slight to moderate skin irritation. In humans, mineral spirits have produced slight to moderate skin irritation particularly with evaporation from the skin is prevented. <br> Animal studies have demonstrated that mineral spirits produced mild respiratory tract irritation at elevated concentrations. Also, sensory respiratory tract irritation was evident by reduced breathing rates in the test animals in certain studies. |
| Symptoms related to <br> Toxicological <br> Characteristics: | Eye contact: |
|  | Adverse symptoms may include the following: pain or irritation watering redness |
|  | Inhalation: |
|  | Repeated or prolonged overexposure to solvents can cause brain or other nervous system damage. The symptoms can include the loss of memory, the loss of intellectual capacity and the loss of coordination. Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness |
|  | Skin contact: |
|  | Adverse symptoms may include the following: irritation redness dryness cracking |
|  | Ingestion: |
|  | Adverse symptoms may include the following: nausea or vomiting |

Toxicological Information: In animal studies utilizing mineral spirits containing up to $22 \%$ aromatics indicated that the acute central nervous system effects are reversible. Based on existing animal studies, the potential for persistent effects is not clear. containing less than $2 \%$ aromatics resulted in slight to moderate skin irritation. In humans, mineral spirits have produced slight to moderate skin irritation particularly with evaporation from the skin is prevented.

Animal studies have demonstrated that mineral spirits produced mild respiratory tract irritation at elevated concentrations. Also, sensory respiratory tract irritation was evident by reduced breathing rates in the test animals in certain studies.
Eye contact:
Adverse symptoms may include the following: pain or irritation watering redness

Inhalation:
Repeated or prolonged overexposure to solvents can cause brain or other nervous system damage. The symptoms can include the loss of memory, the loss of intellectual capacity and the loss of coordination. Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact:
Adverse symptoms may include the following: irritation redness dryness cracking

Ingestion:
Adverse symptoms may include the following: nausea or vomiting

Carcinogenicity/Other Information:

| CAS \# | Hazardous Components (Chemical Name) | NTP | IARC | ACGIH | OSHA |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $64742-47-8$ | Hydrotreated light distillate (petroleum, mineral spirits) | n.a. | n.a. | A4 | n.a. |

ACGIH A4 - Not Classifiable as a Human Carcinogen.

## 12. ECOLOGICAL INFORMATION

General Ecological This product has not been tested as a whole. Information below will be for individual Information:


## 15. REGULATORY INFORMATION

| EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CAS \# | Hazardous Components (Chemical Name) | S. 302 (EHS) | S. 304 RQ | S. 313 (TRI) |
| 64742-47-8 | Hydrotreated light distillate (petroleum, mineral spirits) | No | No | No |
| CAS \# | Hazardous Components (Chemical Name) | Other US EPA or State Lists |  |  |
| 64742-47-8 | Hydrotreated light distillate (petroleum, mineral spirits) | TSCA: Inventory |  |  |
| Additional R Information | ulatory <br> This product is regulated and is subject to certain la Act. These requirements required for safety data sh information, including direc using the product. | he United Stat ng requiremen from the clas (SDS). The ns for use, and | onsumer P nder the Fe ation criteria uct label als uld always | afety Commission azardous Substances zard information es other important in its entirety prior to |

## 16. OTHER INFORMATION

| Revision Date: | 11/05/2021 | Previous revision: | 08/05/2020 |
| :---: | :---: | :---: | :---: |
| Preparer Name: | W.M. Barr EHS Department | (901)775-0100 |  |
| Additional Information About No data available.This Product: |  |  |  |
| Company Policy or Disclaimer: | The information contained h as of the effective date show any kind. Employers should information gathered by them and completeness of inform materials and the safety and must be determined by the use local laws and regulations. | ein is presented in good above. This information se this information only and must make independ ion from all sources to as health of employees. Any er to be in accordance with | lieved to be accurate d without warranty of ment to other ination of suitability use of these data and information le federal, state and |

