Sun-Glo
CHAMPION
SHUFFLEBOARD PRODUCTS
Est. 1935

April 2024 Combined SDS for
- #4 Yellow Bear
- #5 Five Star
- #6 Med Speed

pages 2- 7 - Bunge Corn Meal
pages 8 -16 - EPSilyte - updated Apr 2022
pages 17-30 - StatiKil - updated May 2019 (trace amounts)
pages 31-37 - 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.

BUNGE

Safety Data Sheet

* * * Section 1 - Product and Company Identification * * *

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.

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	**0-5%**

* * * 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, 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

Chemical	ACGIH (TWA & Ceiling)	OSHA (PEL)	Other
Corn Milled Product Dust	10 mg / M^3	15 mg / M^3 (Total) 5 mg / 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 > 50g / m3. 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.

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Reactivity: Stable under normal conditions
Chemical Stability: Stable
Possibility of Hazardous Reactions: None anticipated
Conditions to Avoid (e.g., static discharge, shock, or vibration): Dispersing dust in air above MEC and exposure to ignition sources.
Incompatible materials: No materials to be especially mentioned.
Hazardous Decomposition products: CO_2, H_2S and Oxygen deficient atmosphere under improper storage conditions

* * * 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

* * * Section 12 - 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:

* * * 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

according to European Regulation 1907/2006/EC Article 31, US Hazardous Communication Standard - 29 CFR 1910.1200(g), & Canada WHMIS 2015

Revision: 2022.04.04

1. Identification of the Substance / Mixture and the Company / Undertaking

1.1 Product Identifier

Product Name:	Epsilyte Polystyrene – Grade O19
Chemical Name:	Polystyrene
Synonyms:	Styrene homopolymer, poly(phenylethene), or PS
CAS No.:	9003-53-6

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Raw material for injection molding or extrusion of food packaging, toys, and other articles.

1.3 Details of the Supplier of the Safety Data Sheet

Supplier:

Epsilyte
19250 Baié d'Urfé, QC H9X 3R8
Canada

Logistics & Customer Service Inquiries:

+1 (514) 457-3226 extension 210
customerservice@styrochem.ca

Information In Case of Emergency:

+1 (613) 996-6666 CANUTEC
+1 (514) 457-3227 Epsilyte

2. Hazards Identification

2.1 Classification of the Substance or Mixture

According to Regulation (EC) No. 1272/2008 [CLP]: No need for classification according to GHS criteria for this product.

2.2 Label Elements:

According to Regulation (EC) No. 1272/2008 [CLP]

Hazard Statement:	None
Hazard Pictogram:	None
Signal Word:	None
Precautionary Statements:	None

2.3 Other Hazards

Molten material may cause severe burns.
Dust may irritate skin, eyes and respiratory system.
Danger of dust explosion when material is in a fine dusty form, or when ground into small particle size

3. Composition/Information on Ingredients

3.1 Substances

Contains no hazardous ingredient per European Regulation (EC) No. 1907/2006.

Hazardous Ingredient(s)	CAS No.	EC No.	% by Wt.	(EC) No. 1272/2008 Hazard Pictogram(s), Hazard Categories and Hazard Codes
No Classifiable Hazardous Ingredients	-	-	-	-

4. First Aid Measures

4.1 Description of First Aid Measures

No special precautions necessary.

General Information:
Possible minor skin or respiratory irritant.

If inhaled:
Remove to fresh air.

Skin contact:
Molten material may cause severe burns. After contact with the molten product, cool rapidly with cold water. **Do not** pull solidified product off skin. Seek immediate medical attention.

Eye contact:
If contact with eyes occurs, flush eyes (and under eye lids) immediately with running water for several minutes. If symptoms persist, seek medical attention.

Ingestion:
Unlikely to be hazardous if ingested.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed:

Symptoms: Eye irritation, skin irritation (redness) may occur with contact

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:

Treatment: Treat according to symptoms (decontamination, vital functions), move patient to fresh air

5. Fire Fighting Measures

5.1 Extinguishing media:

Suitable extinguishing media: CO_2 (carbon dioxide), powder or water spray. Sand or earth may be used for small fires only.

Do not use a water jet.

5.2 Special hazards caused by the substance or mixture

Carbon monoxide

Under certain fire conditions, traces of other toxic gases cannot be excluded

5.3 Advice for Firefighters

Wear self-contained respiratory protective device.

Additional information:

Cool endangered receptacles with water spray.

Collect contaminated fire fight water separately. It must not enter sewage.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Beads on the floor could present a slipping hazard. Good housekeeping practices should be followed to avoid this hazard.

Avoid formation and inhalation of dust.

Wear suitable personal protective equipment for eye and face protection.

6.2 Environmental precautions:

Do not allow to enter drains or waterways.

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically (sweeping / shovel) or use vacuum where practical.

Dispose of material collected according to regulations.

Ensure adequate ventilation and earthing.

6.4 Reference to other sections:

See also Sections 8 and 13

7. Handling and Storage

7.1 Precautions for safe handling:

No smoking

Ensure good ventilation of workplace.

Prevent formation of dust.

Any unavoidable deposit of dust must be regularly removed.

Use appropriate industrial vacuum cleaners or central vacuum systems approved for use in hazardous locations for dust removal.

Keep away from ignition sources.

Take precautionary measures to avoid static discharges. Product may charge electrostatically.

Ground all equipment containing material.

Keep container tightly sealed when not in use.

The molten form can cause burns when in contact with skin or eyes.

7.2 Conditions for safe storage, including any incompatibilities:

Ensure good ventilation of storage area.

Protect against moisture, direct sunlight and heat.

Keep way form ignition sources.

No smoking.

Keep packaging tightly sealed and store in cool, dry, well ventilated location.

Combustible materials and strong oxidizing agents should not be stored close by.

7.3 Specific end use(s):

For use in manufacture of injection molded or extruded polystyrene articles.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

8.1.1 Threshold Limits

Country	Chemical (CAS)	Occupational Exposure Limits (Time Weighted Average for 8 hrs.)		Reference
		ppm	mg/m^3	
USA	Dust (Respirable Dust) Not Otherwise Regulated		5	OSHA
Canada				
British Colombia	"Nuisance Dust"		3	OHS Regulations, Guidelines Part 5
Quebec	Particulate Not Otherwise Classified		10	Regulation Respecting Occupational Health and Safety, Schedule 1 Part 1
Saskatchewan	Particles (Insoluble or Poorly Soluble) Not Otherwise Specified		3	The Occupational Health and Safety Regulations 1996, Table 21

Other Provinces & Territories	Particulates Not Otherwise Rgulated, Respirable		3	ACGIH
Germany	Non Specified (Inert) Dust		3	Bundeministerium für Arbeit
France	Non Specified (Inert) Dust		5	Ministère de L'Industrie (RGIE)
Netherlands	Non Specified (Inert) Dust		5	Ministerie van Sociale Zaken en Werkgelegenheid
Spain	Non Specified (Inert) Dust		3	Instrucciones de Técnicas Complementarias (ITC) Orden ITC/2585/2007
United Kingdom	Non Specified (Inert) Dust		4	Health and Safety Executive (HSE) Guidance Note EH40/2005

8.1.2 Sampling methods:

Chemical	Organization	Protocol
Particulates Not Otherwise Regulated, Respirable	NIOSH	NMAM 0600
Particulates Not Otherwise Regulated (Respirable Fraction)	OSHA	PV2121

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

Not established

8.2 Exposure Controls

8.2.1 Appropriate engineering controls:

Use in adequately ventilated areas.

8.2.2 Individual protection measures:

Do not eat, drink, or smoke while working with material.

Keep away from foodstuffs, beverages and feed.

The usual precautionary measures are to be adhered to when handling chemicals.

8.2.2.1.1 Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

8.2.2.1.2 Hand protection:

Thermally insulated glove material required when handling hot material.

8.2.2.1.3 Eye protection:

Tightly sealed goggles

8.2.2.1.4 Skin and body protection:

Protective work clothing

8.2.3 Environmental exposure controls:

Prevent material from entering any drains.

9. Physical and Chemical Properties

General Information *Form:* Beads *Color:* Colorless to white *Odor:* No perceptible odor *pH value:* Not soluble
Change in Condition: *Melting point / melting range:* >132°C (270°F) *Boling point / boiling range:* Undetermined, the substance decomposes. *Flash point:* Vapors are flammable, >350°C *Evaporation rate:* not available
Relative density: 640 kg/m^3
Solubility (water): Insoluble **Solubility (other):** Soluble in aromatic hydrocarbons, halogenated solvents and ketones
Partition coefficient (n-octanol/water): Not available
Auto-ignition temperatures: ca. 490°C
Decomposition temperature: not available
Viscosity: not established
Explosive properties: Dust explosion danger if in a fine dusty form or when ground into small particles
Oxidizing properties: Not oxidizing

9.2 Other information:

Bulk density: approximately 640 kg/m^3 (about 40 pounds per cubic foot)

10. Stability and Reactivity

10.1 Reactivity:

Stable under normal use conditions as prescribed

10.2 Chemical stability:

Stable under normal use conditions as prescribed

10.3 Possibility of hazardous reactions:

Dust explosion danger if in a fine dusty forms or when ground into small particles.

10.4 Conditions to avoid:

Keep way from heat, ignition sources and direct sunlight. Avoid dust generation.

10.5 Incompatible materials:

Avoid strong oxidizing agents

10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide, flammable gases/vapors.

11. Toxicological Information

11.1 Information on Toxicological Effects

11.1.1 Acute toxicity:

Low acute toxicity

Low oral toxicity, LD_{50} (oral): >2000 mg/kg

Low skin acute toxicity

Low eye acute toxicity

11.1.2 Irritation:

Dust can be irritating to the eyes, skin and air passages, may cause redness.

11.1.3 Corrosivity:

Not classified

11.1.4 Sensitization:

Not a skin sensitizer

11.1.5 Repeated dose toxicity:

Repeated exposure to dusts may cause irritation to skin, eyes and respiratory system.

11.1.6 Carcinogenicity:

No data.

11.1.7 Mutagenicity:

No data.

11.1.8 Toxicity for reproduction:

No data.

11.1.9 Route of exposure:

Inhalation and ingestion

For polystyrene, no adverse health effects are expected if handled as recommended with suitable precautions.

12. Ecological Information

12.1 Toxicity

12.1.1 Aquatic toxicity

Non-toxic to aquatic life.

12.2 Persistence and degradability

Polystyrene is not readily biodegradable. Polystyrene is susceptible to UV degradation by exposure to sunlight. Polystyrene can be mechanically separated from water.
Integrated environmental half-life expected to be ≥100 days.

12.3 Bioaccumulative potential:

Polystyrene has a low potential for bioaccumulation and is not readily bioavailable due to its consistency and insolubility in water.

12.4 Mobility in soil:

Polystyrene beads sink in fresh water, may float or sink in salt water and have low mobility in soil.

12.5 Results of PBT and vPvB assessment:

Polystyrene does not fulfill the criteria for PBT (Persistent/Bioaccumulative/Toxic) or vPvB (very Persistent/very Bioaccumulative).

12.6 Other adverse effects:

Polystyrene contains no ozone depleting substances listed in Regulation (EC) 1005/2009.

13. Disposal Considerations

13.1 Waste treatment methods

Recover or recycle if possible.
Do not dispose of or allow entry into sewage systems.
Dispose of in compliance with local and national regulations.

14: Transport Information

14.1 UN Number:	Not classified as dangerous for transport
14.2 UN proper shipping name:	POLMERIC BEADS
14.3 Transport hazard class(es):	Not applicable
14.4 Packaging group:	Not applicable
14.5 Environmental hazards:	Not applicable
14.6 Special precautions for users:	Not applicable

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and IBC Code

Not applicable

15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

US CFR 21 §177. 1640 Polystyrene and Rubber Modified Polystyrene

US CFR 21 §178.3010 Indirect Food Additives; Adjuvants, Production Aids and Sanitizers
US TSCA – Polystyrene is not a reportable substance per 40 CFR 711.6(a)(1)
CONEG Legislative Model for Policies on Packaging
California Safe Drinking Water and Toxic Enforcement Act of 1986 (AKA: Proposition 65)
California H&SC §25214.11-25214.26 "Toxics in Packaging Act"
EU Framework Reg. (EC) No. 1935/2005 Materials and Articles Intended to Come Into Contact with Food
EU Commission Regulations (EU) No. 10/2011 Plastic Materials and Articles Intended to Come Into Contact with Food
EU Directive 94/62/EC Packaging and Packaging Waste
EU Directive 2002/95/EC Restriction of Hazardous Substances
EU Directive 2012/19/EU Waste of Electrical and Electronic Equipment
EU Regulations (EC) No. 1272/2008 Registration, Evaluation and Authorization of Chemicals (REACH)

15.2 Chemical Safety Assessment:

Not available

16: Other Information:

This Safety Data Sheet was prepared in accordance with European Community Regulation (EC 1907/2006 (REACH), 1272/2008 and 453/2010.

The following sections contain revisions or new statements: 1-16

Full text of acronyms, classifications, including the hazard classes and the hazard statements, and precautionary statements:

DNEL	Derived no effect level
PNEC	Predicted no effect concentration
DMEL	Derived minimum effect level
LD50	Lethal dose 50, the amount of a toxic that will kill 50% of a population
LC50	Lethal concentration 50, the concentration of a toxic that will kill 50% of a population
EC50	Effective concentration 50, half maximal effective concentration
PBT	Persistent, bioaccumulative and toxic
vPvB	Very persistent and very bioaccumulative

SAFETY DATA SHEET

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 uses advised against

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 : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : 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: 24.5%

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : 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.

Section 2. Hazards identification

May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : 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.

Response : 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.

Storage : Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.

Disposal Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements 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.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other 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.

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 signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
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

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:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : 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.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : 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.

Special protective equipment for fire-fighters : 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 personnel : No action shall be taken involving any personal risk or without suitable training. 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.

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 non-emergency 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.

Methods and materials for containment and cleaning up

Small 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.

Large spill : 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

Protective measures : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°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.

Advice on general occupational hygiene : 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, including any incompatibilities : Store in accordance with local regulations. Store away from direct sunlight in a dry, cool 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

Ingredient name	Exposure limits
2-Propanol	**ACGIH TLV (United States, 4/2014).** TWA: 200 ppm 8 hours. STEL: 400 ppm 15 minutes. **NIOSH REL (United States, 10/2013).** TWA: 400 ppm 10 hours. TWA: 980 mg/m³ 10 hours. STEL: 500 ppm 15 minutes. STEL: 1225 mg/m³ 15 minutes. **OSHA PEL (United States, 2/2013).** TWA: 400 ppm 8 hours. TWA: 980 mg/m³ 8 hours.
Methyl Acetate	**ACGIH TLV (United States, 4/2014).** TWA: 200 ppm 8 hours. TWA: 606 mg/m³ 8 hours. STEL: 250 ppm 15 minutes. STEL: 757 mg/m³ 15 minutes. **NIOSH REL (United States, 10/2013).** TWA: 200 ppm 10 hours. TWA: 610 mg/m³ 10 hours. STEL: 250 ppm 15 minutes. STEL: 760 mg/m³ 15 minutes. **OSHA PEL (United States, 2/2013).** TWA: 200 ppm 8 hours. TWA: 610 mg/m³ 8 hours.
Propane	**NIOSH REL (United States, 10/2013).** TWA: 1000 ppm 10 hours. TWA: 1800 mg/m³ 10 hours. **OSHA PEL (United States, 2/2013).** TWA: 1000 ppm 8 hours. TWA: 1800 mg/m³ 8 hours.
Hexane	**ACGIH TLV (United States, 4/2014).** **Absorbed through skin.** TWA: 50 ppm 8 hours. **NIOSH REL (United States, 10/2013).** TWA: 50 ppm 10 hours. TWA: 180 mg/m³ 10 hours. **OSHA PEL (United States, 2/2013).** TWA: 500 ppm 8 hours. TWA: 1800 mg/m³ 8 hours.
2-Methylpentane	**ACGIH TLV (United States, 4/2014).** TWA: 500 ppm 8 hours. TWA: 1760 mg/m³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 3500 mg/m³ 15 minutes. **NIOSH REL (United States, 10/2013).** TWA: 100 ppm 10 hours. TWA: 350 mg/m³ 10 hours. CEIL: 510 ppm 15 minutes. CEIL: 1800 mg/m³ 15 minutes.
3-Methylpentane	**ACGIH TLV (United States, 4/2014).** TWA: 500 ppm 8 hours. TWA: 1760 mg/m³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 3500 mg/m³ 15 minutes. **NIOSH REL (United States, 10/2013).** TWA: 100 ppm 10 hours. TWA: 350 mg/m³ 10 hours. CEIL: 510 ppm 15 minutes.

Section 8. Exposure controls/personal protection

2,3-Dimethylbutane	CEIL: 1800 mg/m³ 15 minutes. **ACGIH TLV (United States, 4/2014).** TWA: 500 ppm 8 hours. TWA: 1760 mg/m³ 8 hours. STEL: 1000 ppm 15 minutes. STEL: 3500 mg/m³ 15 minutes. **NIOSH REL (United States, 10/2013).** TWA: 100 ppm 10 hours. TWA: 350 mg/m³ 10 hours. CEIL: 510 ppm 15 minutes. CEIL: 1800 mg/m³ 15 minutes.

Appropriate engineering 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.

Environmental exposure controls : 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.

Individual protection measures

Hygiene measures : 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.

Eye/face protection : 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.

Skin protection

Hand protection : 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.

Body protection : 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 anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : 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.

Respiratory protection : 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°C (-20.2°F) [Pensky-Martens Closed Cup]

Evaporation rate : 9.1 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 1%
Upper: 16%

Vapor pressure : 13.5 kPa (101.325 mm Hg) [at 20°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 cm^2/s (<20.5 cSt)
Kinematic (40°C (104°F)): <0.205 cm^2/s (<20.5 cSt)

Aerosol product

Type of aerosol : Spray

Heat of combustion : 0.00003571 kJ/g

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame).

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2-Propanol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Methyl Acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	>5 g/kg	-
Hexane	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
	LD50 Oral	Rat	15840 mg/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	-	100 milligrams	-
	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

Product/ingredient name	OSHA	IARC	NTP
2-Propanol	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
2-Propanol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Propane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Hexane	Category 3	Not applicable.	Respiratory tract irritation and

Section 11. Toxicological information

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

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
2-Propanol	Category 2	Not determined	Not determined
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

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 characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
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

Skin contact : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	7553.9 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
2-Propanol	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
Methyl Acetate	Acute LC50 320000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Hexane	Acute LC50 2500 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

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

Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Hexane	-	501.187	high

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

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

Section 13. Disposal considerations

Disposal methods : 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** (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 to Annex II of MARPOL 73/78 and the IBC Code : Not available.

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.)

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/buyer/user 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.

Section 16. Other information

SAFETY DATA SHEET

Klean Strip Odorless Mineral Spirits

Revision: 11/05/2021
Supersedes Revision: 08/05/2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Klean Strip Odorless Mineral Spirits

Company Name: W. M. Barr
2105 Channel Avenue
Memphis, TN 38113

Phone Number: (901)775-0100

Web site address: www.wmbarr.com

Emergency Contact: 3E 24 Hour Emergency Contact (800)451-8346

Information: W.M. Barr Customer Service (800)398-3892

Intended Use: Paint, stain, and varnish thinning.

Product Code: GKSP94006P, QKSP94005, QKSP945, GKSP94006, GKSP94214

2. HAZARDS IDENTIFICATION

Flammable Liquids, Category 3
Skin Corrosion/Irritation, Category 2
Specific Target Organ Toxicity (single exposure), Category 3
Aspiration Toxicity, Category 1

GHS Signal Word: **Danger**

GHS Hazard Phrases:
Flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause drowsiness or dizziness.

GHS Precautionary Phrases:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Keep container tightly closed.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep cool.

GHS Response Phrases:
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
Specific treatment see label.
Do NOT induce vomiting.
If skin irritation occurs, get medical advice/attention.
Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal Phrases:
Store container tightly closed in well-ventilated place.
Store locked up.
Dispose of contents/container according to local, state and federal regulations.

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 Aggravated By Exposure: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

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: Primary routes of exposure:
Inhalation, ingestion, and dermal.

Note to Physician: Call your local poison control center for further instructions.

5. FIRE FIGHTING MEASURES

Flammability Classification: NFPA Class II

Flash Pt: > 105.80 F Method Used: TAG Closed Cup

Explosive Limits: LEL: .6 UEL: 5.5

Autoignition Pt: 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: No data available.

Hazardous Combustion 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

Precautions To Be Taken in Handling: 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.

Precautions To Be Taken in Storing: 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 distillate (petroleum, mineral spirits)	ACGIH TLV	TLV: 200 mg/m3	

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 Concentration:	ND

Octanol/Water Partition Coefficient:	ND
Percent Volatile:	100.0 % by weight.
VOC / Volume:	780.0000 G/L
Autoignition Pt:	456.80 F
Decomposition Temperature:	No data.
Viscosity:	ND
Additional Physical Information	Conductivity = <5 picosiemens/meter (unadditized) ND = Not Determined

10. STABILITY AND REACTIVITY

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. Do not store with strong oxidizing agents.
Incompatibility - Materials To Avoid:	Incompatible with strong oxidizing agents.
Hazardous Decomposition or Byproducts:	Thermal decomposition may produce carbon monoxide and carbon dioxide.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

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. 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 Toxicological 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

Carcinogenicity/Other Information: ACGIH A4 - Not Classifiable as a Human Carcinogen.

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.

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with applicable local, state, and federal regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Paint related material
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN1263 **Packing Group:** III

Additional Transport Information: The shipper may apply one of the following exceptions: Combustible Liquid, Consumer Commodity, Limited Quantity, Viscous Liquid, Does Not Sustain Combustion, or others, as allowed under 49CFR Hazmat Regulations. Please consult 49CFR Subchapter C to ensure that subsequent shipments comply with these exceptions.

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 Regulatory Information This product is regulated by the United States Consumer Product Safety Commission and is subject to certain labeling requirements under the Federal Hazardous Substances Act. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS). The product label also includes other important information, including directions for use, and should always be read in its entirety prior to using the product.

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 This Product: No data available.

Company Policy or Disclaimer: The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.