

SAFETY DATA SHEET

Revision Date 01-Jan.-2023 Version

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name GRADE & YIELD BROWN

Other means of identification

Product Code 20571

Recommended use of the chemical and restrictions on use
Recommended Use Brown meat branding ink

Uses advised against Follow the directions for use on the label when applying this product

Details of the supplier of the safety data sheet

Manufacturer Address

Safe Foods Chemical Innovations

1501 E. 8th Street

North Little Rock, AR 72114

Emergency telephone number

Company Phone Number 501-758-8500

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Specific target organ toxicity (single exposure) | Category 1 - (H370) |
|--|---------------------|
| Serious eye damage/eye irritation | Category 2B |
| Flammable liquids | Category 2 |

Label elements

Emergency Overview

DANGER

Hazard statements

Causes damage to organs

Causes eye irritation

Highly flammable liquid and vapor





Physical state Liquid Color Dark brown / Black

Odor Alcoholic

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not breathe dusts or mists

Do not eat, drink or smoke when using this product

Keep away from heat/sparks/open flames/hot surfaces. No smoking

Keep container tightly closed

Ground/bond container and receiving equipment

Use only non-sparking tools

Take precautionary measures against static discharge

Use explosion-proof electrical/ventilating/lighting/equipment

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician

Specific treatment (see Section 4 on SDS)

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 advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

GRADE & YIELD BROWN

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

- · May be harmful if swallowed
- Toxic to aquatic life with long lasting effects

| 3. COMPOSITION/INFORMATION ON INGREDIENTS | | | | | |
|---|-----------|-------|--|--|--|
| Chemical Name CAS No. Weight-% | | | | | |
| Water | 7732-18-5 | 10-30 | | | |
| Ethyl alcohol | 64-17-5 | 50-70 | | | |
| 1,2-Propylene glycol | 57-55-6 | 1-10 | | | |
| Isopropyl alcohol | 67-63-0 | 1-5 | | | |
| Methanol | 67-56-1 | 1-5 | | | |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact Eye contact

lenses, if present, after first 5 minutes, then continue rinsing eye. Seek immediate medical

attention/advice.

Wash off immediately with soap and plenty of water while removing all contaminated clothes Skin contact

and shoes. Wash contaminated clothing and shoes before reuse. Get medical attention if

irritation develops and persists.

Remove to fresh air. Administer oxygen if breathing is difficult. Call a physician immediately. Inhalation

Ingestion Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an

unconscious person. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

See Section 11 for symptom information. **Symptoms**

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical. Water spray (fog). Carbon dioxide (CO2). Foam.

Unsuitable extinguishing media None.

Specific hazards arising from the chemical

Flammable. Vapors may travel to source of ignition and flash back.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO2).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8. Ensure adequate ventilation, especially

in confined areas.

For emergency responders **Environmental precautions** Isolate area. Keep unnecessary personnel away.

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. See section 12 for

additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Contain and collect spillage with

> non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Use clean non-sparking tools to collect absorbed material. May be ignited by friction, heat, sparks or flames. Soak up with inert absorbent material. Collect spillage. Sweep up and

shovel into suitable containers for disposal. Following product recovery, flush area with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Revision Date 01-Jan.-2023

GRADE & YIELD BROWN

Advice on safe handling Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric

motors and static electricity). Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Use only in well-ventilated areas. Avoid breathing vapors or mists. Wash thoroughly after handling. Handle in accordance with good

industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.

Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric

motors and static electricity).

Incompatible materials Reacts violently with strong oxidants such as nitric acid and silver nitrate causing fire and

explosion hazard. Reacts slowly with calcium hypochlorite and ammonia causing fire and

explosion hazard.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------|----------------|---|---------------------------------------|
| Ethyl alcohol | STEL: 1000 ppm | TWA: 1000 ppm, 1900 mg/m ³ | IDLH: 3300 ppm |
| 64-17-5 | | | TWA: 1000 ppm, 1900 mg/m ³ |
| Isopropyl alcohol | STEL: 400 ppm | TWA: 400 ppm, 980 mg/m ³ | IDLH: 2000 ppm |
| 67-63-0 | TWA: 200 ppm | (vacated) STEL: 500 ppm, 1225 mg/m ³ | TWA: 400 ppm, 980 mg/m ³ |
| | | | STEL: 500 ppm, 1225 mg/m ³ |
| Methanol | STEL: 250 ppm | TWA: 200 ppm, 260 mg/m ³ | IDLH: 6000 ppm |
| 67-56-1 | TWA: 200 ppm | (vacated) STEL: 250 ppm, 325 mg/m ³ | TWA: 200 ppm, 260 mg/m ³ |
| | | | STEL: 250 ppm, 325 mg/m ³ |

Appropriate engineering controls

Engineering Controls Showers, eyewash stations, ventilation system.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective Neoprene™ gloves or rubber gloves. Normal work clothing (long sleeved

shirt and long pants) is recommended. Apron recommended.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn.

General Hygiene Considerations Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated

clothing and shoes before reuse. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearance Aqueous solution Odor Alcoholic

Color Dark brown / Black Odor threshold No information available

Property Values Remarks • Method

pH 9 ±1 @ 21°C

Melting point / freezing point < -6.7 °C / < 20 °F Boiling point / boiling range < -6.7 °C / 170.6 °F

Flash point 16 °C / 60 °F Closed cup

Evaporation rate > 1

Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit:

Lower flammability limit:

Vapor pressure

Vapor density

No information available
No information available
No information available

Specific Gravity 0.885 g/cc

Water solubility Completely soluble
Solubility in other solvents No information available

Partition coefficient
Autoignition temperature
Decomposition temperature
Kinematic viscosity
No information available
No information available
No information available

Dynamic viscosity

Explosive properties

Oxidizing properties

VOC Content (%)

No information available
No information available
66.42% (4.909 lbs/gal)

Revision Date 01-Jan.-2023

GRADE & YIELD BROWN

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Reacts violently with strong oxidants such as nitric acid and silver nitrate causing fire and explosion hazard. Reacts slowly with calcium hypochlorite and ammonia causing fire and explosion hazard.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system. May

cause central nervous system depression with nausea, headache, dizziness, vomiting, and

incoordination.

Eye contact Irritating to eyes. Symptoms include itching, burning, redness, and tearing of eyes.

Skin Contact May cause slight irritation. Prolonged skin contact may defat the skin and produce

dermatitis.

Ingestion May cause drowsiness or dizziness. Ingestion may cause central nervous system

depression, gastrointestinal irritation, nausea, vomiting, and diarrhea.

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------------------------|--------------------|------------------------|------------------------|
| Ethyl alcohol 64-17-5 | = 7060 mg/kg (Rat) | - | = 124.7 mg/L (Rat)4 h |
| 1,2-Propylene glycol 57-55-6 | = 20 g/kg (Rat) | = 20800 mg/kg (Rabbit) | - |
| Isopropyl alcohol 67-63-0 | = 1870 mg/kg (Rat) | = 4059 mg/kg (Rabbit) | = 72600 mg/m³ (Rat)4 h |
| Methanol 67-56-1 | = 6200 mg/kg (Rat) | = 15840 mg/kg (Rabbit) | = 22500 ppm (Rat)8 h |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available. **Germ cell mutagenicity** No information available.

Carcinogenicity Ethanol has been shown to be carcinogenic in long-term studies only when consumed as

alcoholic beverage.

The table below indicates whether each agency has listed any ingredient as a carcinogen:

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|-------------------|-------|---------|-----|------|
| Isopropyl alcohol | - | Group 3 | - | X |
| 67-63-0 | | · | | |

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 3 - "not classifiable as human carcinogens"

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure H370 - Causes damage to organs.

STOT - repeated exposure No information available. Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

 Oral LD50
 2,183.70 mg/kg

 Dermal LD50
 7,912.60 mg/kg

 Mist
 13.507 mg/l

 Vapor
 1,218.8717 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|----------------------|------------------------|--|----------------------------|
| Ethyl alcohol | - | 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static | 9268-14221: 48 h Daphnia |
| 64-17-5 | | 13400 - 15100: 96 h Pimephales promelas mg/L LC50 | magna mg/L LC50 |
| | | flow-through | 2: 48 h Daphnia magna mg/L |
| | | 100: 96 h Pimephales promelas mg/L LC50 static | EC50 Static |
| 1,2-Propylene glycol | 19000: 96 h | 41-47: 96 h Oncorhynchus mykiss mL/L LC50 static | 1000: 48 h Daphnia magna |
| 57-55-6 | Pseudokirchneriella | 51400: 96 h Pimephales promelas mg/L LC50 static | mg/L EC50 Static |
| | subcapitata mg/L EC50 | 51600: 96 h Oncorhynchus mykiss mg/L LC50 static | 1 |
| | - | 710: 96 h Pimephales promelas mg/L LC50 | į |
| Isopropyl alcohol | 1000: 72 h Desmodesmus | 11130: 96 h Pimephales promelas mg/L LC50 static | 13299: 48 h Daphnia magna |
| 67-63-0 | subspicatus mg/L EC50 | 9640: 96 h Pimephales promelas mg/L LC50 flow-through | mg/L EC50 |
| | 1000: 96 h Desmodesmus | 1400000: 96 h Lepomis macrochirus μg/L LC50 | ı |
| | subspicatus mg/L EC50 | | i |
| Methanol | - | 13500-17600: 96 h Lepomis macrochirus mg/L LC50 flow-through | - |
| 67-56-1 | | 18-20: 96 h Oncorhynchus mykiss mL/L LC50 static | ı |
| | | 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 | ı |
| | | flow-through | ı |
| | | 28200: 96 h Pimephales promelas mg/L LC50 flow-through | ı |
| | | 100: 96 h Pimephales promelas mg/L LC50 static | i |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|-----------------------------|-----------------------|
| Ethyl alcohol - 64-17-5 | -0.32 |
| Isopropyl alcohol - 67-63-0 | 0.05 |
| Methanol - 67-56-1 | -0.77 |

Mobility

Soluble in water.

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastesDisposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Disposal of wastes
Disposal should be in accordance with foderal, state and local regulations.

Contaminated packaging Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT

UN/ID No. 1993

Proper shipping name Flammable liquids, n.o.s. (contains ethanol and isopropanol)

Hazard Class 3
Packing Group II
Emergency Response Guide Number 128

15. REGULATORY INFORMATION

International Inventories

TSCA Complies DSL/NDSL Complies

EINECS/ELINCS No information available

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372 **Note:** Isopropyl alcohol only needs to be reported if it is being manufactured by the strong acid process. Facilities that process or otherwise use isopropyl alcohol are NOT covered and should NOT file a report.

| Chemical Name | SARA 313 - Threshold Values % |
|--------------------|-------------------------------|
| Methanol - 67-56-1 | 1.0 |

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard No

GRADE & YIELD BROWN

Physical Ver

Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|---------------|--------------------------|----------------|--------------------------|
| Methanol | 5000 lb | - | RQ 5000 lb final RQ |
| 67-56-1 | | | RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

WARNING! "This product can expose you to chemicals which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov." Methanol 67-56-1;

Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------|------------|---------------|--------------|
| Ethyl alcohol 64-17-5 | Х | X | X |
| 1,2-Propylene glycol 57-55-6 | Х | - | X |
| Isopropyl alcohol 67-63-0 | Х | X | X |
| Methanol 67-56-1 | Х | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number

Not applicable

| | <u> </u> | !! | | | |
|-----------------------|------------------|-----------------------|--------------|--|--|
| 16. OTHER INFORMATION | | | | | |
| NFPA | Health hazards 1 | Flammability 4 Instab | lity 0 | Physical and Chemical Properties None | |
| HMIS | Health hazards 1 | Flammability 4 Physic | al hazards 0 | Personal protection B (safety glasses, gloves) | |
| Prepared By | | Technical Department | | , | |

Issue Date30-Apr-2014Revision Date01-Jan.-2023

Version 1

Revision Note Company Name Update

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The health hazards given on this SDS apply to this product in its concentrated form (as supplied) and may differ significantly at use dilution. The signs and symptoms of exposure apply only to negligence in handling or misuse of the concentrated product and not to the routine exposure of the diluted product under conditions of ordinary use.

End of Safety Data Sheet