W. F. Leonard Co., Inc
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SAFETY DATA SHEET

LENCO MARK 32

SECTION 1: IDENTIFICATION

GHS product identifier: Red Meat Branding Ink
Chemical name: Mark 32
Other Means of identification: Red Liquid
Product type: Meat Branding Ink
Suppliers Details: W. F. Leonard Co. Inc.
111 West Main St. Meriden , KS 66512
Emergency telephone number: 785-484-3342

SECTION 2: Hazards identification

OSHA/HCS status: Acetone considered hazardous by the OSHA Hazard Communication (29CFR 1910.1200)
Classification of the substance or mixture: Flammable Vapors - Category 1
GHS label elements Hazard pictograms:

Signal word: Warning
Hazard statements: Flammable Vapor/Eye Irritation
Causes serious eye irritation.
May cause respiratory irritation.
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: Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handing equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.
Response: 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.. If irritation persists; Get medical attention.
Storage: Store locked up. Store In a well-ventilated place. Keep cool.
Disposal: Dispose of contents and container In accordance with all local, regional, national and international regulations.
Hazards not otherwise classified: None known.

Section 3. Composition/information on ingredients

Substance/misxture Chemical name: SUBSTANCE / Dimethylketone
Other means of identification: 2-propanone

CAS number: 67-64-1
Product code: 0500000

Ingredient Name	%	CAS Number
Dimethylketone	10%	67-64-1

Occupational exposure limits, If available, are listed In Section 8.

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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. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: 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. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. 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: May cause respiratory irritation.
Skin Contact: No known significant effects or critical hazards.
Ingestion: 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

Skin Contact: No specific data.
Ingestion: No specific data.

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 treatment: No specific treatment.
Protection to 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)

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Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media:	Use dry chemical, CO2 , water spray (fog) or foam.
Unsuitable extinguishing media:	Do not use water jet.
Specific hazards arising from the chemical:	Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
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.
Remark:	No additional remark.
Remark:	No additional remark.

Section 5. Fire-fighting 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. 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.
For emergency responders:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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.

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section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Control parameters

Dimethyl ketone: ACGIH TLV (United States).
STEL: 500 ppm
TWA: 250 ppm

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.

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Eye/face protection: Safety eye-wear 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 protecttve dothlng. 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 handing 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 wonting limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state:	Liquid.
Color:	Red
Odor:	Ketone
Odor threshold:	Not available.
pH:	Not available.
Melting point:	NOT available.
Boiling point:	212°
Flash point:	863° F
Burning time:	Not applicable.
Burning rate:	Not applicable.
Evaporation rate:	5.6 compared with Butyl acetate.
Flammability (solid, gas):	flammable in the presence of the following materials or conditions: open flames, spancs and static discharge and heat. Flammable in the presence of the following materials or conditions: reducing materials. Slightly flammable in the presence of the following materials or conditions: oxidizing materials and combustible materials.
Lower and upper explosive (flammable) limits:	Lower. 2.6% Upper. 12.8%
Vapor pressure:	Not available
Vapor density:	Like Water
Relative density:	Not available
Solubility:	Easily soluble in the following materials: cold water, hot water, methanol, diethyl ether. Partially soluble in the following materials: n-octanol.

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Solubility in water: Complete
Partition coefficient: n–octonal/water: Not available,
Auto-ignition temperature: 863° F
Decomposition Temperature: Not available.
SADT: Not available.
Viscosity: Not available.

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). 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.
Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 8. Exposure controls/personal protection

Information on toxicological effects

Acute toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Dimethylketone	LC50 Inhalation Gas.	Rat	75.9 mg/l	8 hours
	LOSO Dermal	Rabbit	20000 mg/kg	-
	LOSO Oral	Dog	8000 mg/kg	-
	LOSO Oral	Mouse	3000 mg/kg	-
	LOSO Oral	Rat	5800 mg/kg	-

Conclusion/Summary: No additional remark.

Irritation/corrosion: Not available.
Sensitization: Not available.
Mutagenicity: Not available.
Carcinogenicity: Not available.

Conclusion/Summary: No additional remark.

Reproductive toxicity: Not available.
Teratogenicity: Not available.
Not available.
Not available.

Specific Organ toxicity (Single exposure)

Name	Category	Route of Exposure	Target organs
Dimethylketone	Category 3	Not applicable	Respiratory tract irritation

Specific Organ toxicity (repeated exposure): Not available.
Aspiration hazard: Not available.
Information on the likely routes or exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye Contact: Causes serious eye Irritation.
Inhalation: May cause respiratory irritation.
Skin contact: No known significant effects or critical hazards.
Ingestion: 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
Skin contact: No specific data.
Ingestion: No specific data.

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

Potential chronic health effects

Acute toxicity estimates: Not available.

Section 12. Ecological information

Toxicity:

Not available.

Potential chronic health effects

Conclusion/summary: No additional remark.

Bio-accumulative potential:

Not available.

Mobility-in soil

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

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

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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 safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN Number	UN Proper Shipping Name	Transport hazard class(es)	Packing group	Environmental hazards	Additional Information
DOT Classification	UN1090	Acetone	1 	1	No.	No Additional remark.

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States Inventory (TSCA Sb): This material is listed or exempted.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311 : No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304

composition/information on ingredients: No products were found.

SARA 304 RQ Not applicable.

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SARA 302/304

Classification:	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
Canada inventory:	Not determined.

International regulations

Chemical Weapons Convention List Schedule I Chemicals:	Not listed.
Chemical Weapons Convention List Schedule II Chemicals:	Not listed.
Chemical Weapons Convention List Schedule III Chemicals:	Not listed.

Section 16. other information

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

HEALTH	1
FLAMMABILITY	1
Physical hazards	0

California Prop. 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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 & Coating Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.
The customer is responsible for detennInIng the PPE code for this material.

National Fire Protection Association (U.S.A.)

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History

Issue Date:	01/01/2020
Revision date:	10/01/2025
Revision commnets:	Changed Personnel Protection Statement 12/05/02; GHS Update 01/08/2019
Version:	2
Prepared by:	Daytime Phone - 785-484-3342
Key to abbrevations:	ATE = Acute Toxicity Estimate BCF = Bioconcentratlon Factor GHS = Globally Harmonized System of Classification and Labeling of Chemicals IATA = International Air Transport Association

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Key to abbrevations: IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN= United Nations

References:
-Material safety data sheet emitted by: la Commission de la Santé et de la Sécurité du Travail du Québec.
-The Sigma-Aldrich Library of Chemical Safety Data, Edition II.
-Hawley, G.G.. The Condensed Chemical Dictionary, 11e ed., New York N.Y., Van Nostrand Reinold, 1987.

Notice to reader

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Final determination of suitability of any material Is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.