SAFETY DATA SHEETS

This SDS packet was issued with item:

077291693

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

077284532 077284540 077285026

SAFETY DATA SHEET

(Revision: 2/26/2015)

1. Identification.

- **Product Type:** Lubricant for use on dental Die Stones
- **Trade Names:** Lubritex 12 Die Lubricant, PDQ Die Lubricant
- **Product Use:** Die lubricant
-
- **Company :** **Whip Mix Corporation**
  361 Farmington Avenue
  Louisville, Kentucky, USA 40209
  Emergency Telephone Number: (502) 634-1451
  Fax Number: (502) 634-4512
  Transportation Emergencies: ***CHEMTREC 1(800) 424-9300 (U.S. and Canada)***
  International Calls: 1- 703-527-3887 (Collect calls accepted)

2. Hazard Identification

OSHA Hazcom 2014 Classification:

Health Hazards	Physical Hazards
Acute Toxicity Category 4 (Oral) Skin Irritation Category 2 Eye Irritation Category 2 Specific Target Organ Toxicity – Single Exposure Category 1	Flammable Liquid Category 2

Labeling:

Danger!

Highly flammable liquid and vapor.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Causes damage to optic nerve and central nervous system.

Prevention

Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment
Use explosion-proof electrical, ventilating and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust, fume, gas, mist, vapors or spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves and eye protection.

Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Rinse mouth.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
If skin irritation occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.

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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.
IF exposed or concerned: Call a POISON CENTER or doctor.
In case of fire: Use water fog, alcohol foam, carbon dioxide or dry chemical to extinguish.

Storage and Disposal
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents and container in accordance with local and national regulations.

Other Hazards: None

3. Composition/Information on Ingredients.

Substance	***CAS No.***	***%***
Ethanol	64-17-5 /	50-70%
Dodecylbenzene Sulfonate	68584-25-8	10-20%
Isopropanol (Isopropyl Alcohol)	67-63-0	1-10%
Methanol	67-56-1	1-<5%
Methyl Isobutyl Ketone	108-10-1	1-5%

The specific identity and/or concentration of composition has been withheld as a trade secret.

4. First-Aid Measures.

Inhalation: Remove exposed person to fresh air. If irritation or other symptoms persist, get medical attention.
Eyes: Flush with large quantities of water for 15 minutes, holding the eyelids apart. If irritation persists consult a physician.
Skin: Wash skin with soap and water. If irritation develops and persists, get medical attention.
Ingestion: If swallowed, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Do not induce vomiting. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: Causes eye irritation. Prolonged skin contact may cause irritation and drying of the skin. Inhalation of vapors or mists may cause respiratory irritation and central nervous system effects. Harmful if swallowed. Harmful if swallowed. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea and visual disturbances.

Indication of Any Immediate Medical Attention and Special Treatment Needed: Immediate medical attention is not required under normal conditions of use. If large amount is swallowed immediate medical attention is recommended.

5. Fire-Fighting Measures.

Suitable (and unsuitable) Extinguishing Media: Use water fog, alcohol foam, carbon dioxide or dry chemical.
Specific Hazards Arising From the Chemical: This product is highly flammable and forms explosive mixtures with air. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat. Combustion may produce carbon oxides.

Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus. Cool fire exposed containers with water.

6. Accidental Release Measures.

Personal Precautions, Protective Equipment and Emergency Procedures: Evacuate spill area and keep unprotected personnel away. Remove all sources of ignition. Ventilate area with explosion proof equipment. Wear appropriate protective clothing as described in Section 8.
Environmental Hazards: Report releases as required by local and national authorities.
Methods and Materials for Containment and Cleaning up: Contain and collect using inert absorbent materials and place in appropriate containers for disposal. Use non-sparking tools and equipment. If spill has not ignited, use water spray to disperse the vapors and protect personnel attempting to stop leak. Do not flush to sewer!

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7. Handling and Storage.

Precautions for Safe Handling: Avoid contact with the eyes, skin and clothing. Avoid breathing vapors. Wear protective clothing and equipment as described in Section 8. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep product away from heat, sparks, flames and all other sources of ignition. Do not permit smoking in use or storage areas. Use with non-sparking tools and explosion proof equipment. Electrically bond and ground containers for transfer.

Empty containers retain product residues can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage, including Any Incompatibilities: Store in accordance with regulations for the storage of flammable liquids. Store in a dry, well ventilated area away from heat, direct sunlight and all sources of ignition. Store away from oxidizers and other incompatible materials. Protect from physical damage.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits:

Ethanol	1000 ppm TWA OSHA PEL 1000 ppm STEL ACGIH TLV
Dodecylbenzene Sulfonate	None Established
Isopropanol (Isopropyl Alcohol)	400 ppm TWA OSHA PEL 200 ppm TWA, 400 ppm STEL ACGIH TLV
Methanol	200 ppm TWA OSHA PEL 200 ppm TWA, 250 ppm STEL ACGIH TLV
Methyl Isobutyl Ketone	100 ppm OSHA PEL 20 ppm TWA, 75 ppm STEL ACGIH TLV

Appropriate engineering controls: Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits.

Respiratory protection: If the exposure limits are exceeded an approved organic vapor or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with applicable regulations and good industrial hygiene practice.
Skin protection: For prolonged use wear butyl rubber gloves.
Eye protection: Chemical safety goggles if splashing is possible.
Other: Impervious clothing as needed to avoid contamination of personal clothing.

9. Physical and Chemical Properties.

Appearance: Dark Violet Liquid
Odor: Alcohol odor.

Odor threshold: 0.121 (methyl isobutyl ketone))
Melting point/freezing point: -173.2°F (-114-1°C) (ethanol)
Flash point: 61°F (16.1°C)
Flammability (solid, gas): Not applicable
Flammable limits: LEL: 1.2% (methyl isobutyl ketone)
Vapor pressure: 42 mmHg at 20°C
Relative density: 0.8
Partition coefficient: n-octanol/water: Not available
Decomposition temperature: Not available
Explosive Properties: Not applicable

pH: Not available
Boiling point: 172°F (77.8°C)

Evaporation rate: Not available

UEL: 36% methanol)
Vapor density (air = 1): 3
Solubility In Water: Complete
Auto-ignition temperature: 867°F (464°C)
Viscosity: Not applicable
Oxidizing Properties: Not applicable

10. Stability and Reactivity.

Reactivity: None known.
Chemical stability: Stable
Possibility of hazardous reactions: None known.

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Conditions to avoid: Keep away from heat and all sources of ignition.
Incompatible materials: Avoid oxidizing agents, acids and alkalies.
Hazardous decomposition products: Thermal decomposition may produce carbon oxides.

11. Toxicological Information.

Potential Health Effects:

Eyes: May cause irritation with redness, tearing and stinging.
Skin: Prolonged contact may cause irritation and drying of the skin. Methanol may be absorbed through the skin causing symptoms listed under ingestion.
Ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation and nervous system depression with symptoms of headache, dizziness, nausea, narcosis and unconsciousness. Methanol is very slowly eliminated from the body. Ingestion of methanol may cause nervous system effects, blurred vision, changes in color perception, blindness, coma and death.
Inhalation: Inhalation of vapors may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness, giddiness, intoxication, nausea, vomiting, disorientation, stupor and unconscious. Overexposure to may cause central nervous system effects and other systems listed under ingestion.
Chronic Health Effects: Prolonged and repeated overexposure to high concentrations of methanol vapors may have a cumulative effect cause ringing in the ears, insomnia, trembling, unsteady gait, vertigo and clouded or double vision.
Mutagenicity: None of the components have been shown to cause mutagenic activity.
Reproductive Toxicity: Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, resulting in fetal alcohol syndrome. These effects include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders and small head size.
Carcinogenicity: None of the components of this product are listed as carcinogens by OSHA, IARC or NTP and EU CLP.

Acute Toxicity Data:

Acute Toxicity Estimate: Oral: 1538 mg/kg, Inhalation: >62.5 mg/L/4 hr, Dermal: 6250 mg/kg
Ethanol: Oral rat LD50 10470 mg/kg, Inhalation rat LC50 117 mg/L
Ethoxylated Alkyl Acid Phosphate: Oral rat LD50 >4640 mg/kg
Isopropanol: Oral rat LD50 5840 mg/kg; Inhalation rat LC50 24.6 mg/L/4 hr, Dermal rabbit LD50 12874 mg/kg
Glycerin: Oral rat LD50 27,200 mg/kg, Dermal guinea pig LC50 56,750 mg/kg
Methanol: Oral rat LD50 >1187 mg/kg, Inhalation rat LC50 8.2 mg/L/4 hr, Dermal rat LD50 15800 mg/kg
Methyl Isobutyl Ketone: Oral rat LD50 2080 mg/kg, Inhalation rat LC50 8.2-16.4 mg/L, Dermal rabbit LD50 >2000 mg/kg.

12. Ecological Data.

Ecotoxicity:

Ethanol: 96 hr LC50 14.2 mg/L, 48 hr LC50 Ceriodaphnia dubia 5012 mg/L, 72 hr EC50 Chlorella vulgaris 275 mg/L
Ethoxylated Alkyl Acid Phosphate: No data available
Isopropanol: 96 hr LC50 Pimephales promelas 10,000 mg/L, 24 hr LD50 daphnia magna >10,000 mg/L
Glycerin: 96 hr LC50 Oncorhynchus mykiss 54,000 mg/L, 48 hr LD50 daphnia magna 1955 mg/L
Methanol: 96 hr LC50 Pimephales promelas 29.4 g/L hr; 24 hr EC50 Daphnia magna >10,000 mg/L/24 hr
Methyl Isobutyl Ketone: 96 hr LC50 Danio rerio >179 mg/L, 48 hr EC50 daphnia magna >200 mg/L

Persistence and degradability: Isopropanol, methanol, ethanol and dodecylbenzene sulfonate are readily biodegradable.
Bioaccumulative potential: Ethanol and isopropanol have a BCF of 3. Methyl isobutyl ketone has a BCF of 2. This suggests the potential for bioconcentration in aquatic organisms is low.
Mobility in soil: Ethanol, methanol, isopropanol and methyl isobutyl ketone are highly mobile in soil.
Other adverse effects: Not required.

13. Disposal Considerations.

Dispose in accordance with all national and local regulations.

14. Transport Information.

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	UN Number	UN Proper Shipping Name	Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	UN1993	Flammable Liquid, n.o.s. (Ethanol, Methanol, Methyl Isobutyl Ketone)	3	PG II	
CANADIAN TDG	UN1993	Flammable Liquid, n.o.s. (Ethanol, Methanol, Methyl Isobutyl Ketone)	3	PG II	
EU ADR/RID	UN1993	Flammable Liquid, n.o.s. (Ethanol, Methanol, Methyl Isobutyl Ketone)	3	PG II	
IMDG	UN1993	Flammable Liquid, n.o.s. (Ethanol, Methanol, Methyl Isobutyl Ketone)	3	PG II	
IATA/ICAO	UN1993	Flammable Liquid, n.o.s. (Ethanol, Methanol, Methyl Isobutyl Ketone)	3	PG II	

Special precautions: Not applicable
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

15. Regulatory Information.

Safety, health, and environmental regulations specific for the product in question

US Regulations

SARA Section 313 (40 CFR 372): This product contains the following toxic chemical(s) subject to reporting requirements of SARA 313:

Methanol	67-56-1	1-5%
Methyl Isobutyl Ketone	108-10-1	1-5%

SARA Section 311/312 (40 CFR 370) Hazard Categories: Acute Health, Chronic Health, Fire hazard

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA): This product has a Reportable Quantity (RQ) of 100,000 lbs. based on the RQ for methanol of 5,000 lbs. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act (TSCA): All of the components of this product are listed on the TSCA inventory

California: This product contains the following substances known to the state of California to cause cancer and/or reproductive toxicity:

Methanol	67-56-1	1-5%

International Chemical Inventories

Australia: All of the components in this product are listed on the Australian Inventory of Chemical Substances (AICS) or exempt.

Canadian Environmental Protection Act: All of the components of this product are listed on the Domestic Substances List (DSL).

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China: All of the components in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC) or exempt.

European Union: All the components in this product are listed on the EINECS inventory or exempt.

Japan: All of the components in this product are listed on the Japanese Existing and New Chemical Substances Inventory (ENCS) or exempt.

Korea: All of the components in this product are listed on the Korean Existing Chemicals List (KECL) or exempt.

Philippines: All of the components of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or exempt.

16. Other Information.

- HMIS Rating: Health 2 Flammability 3 Reactivity 0
  Hazard: 4-Severe; 3-Serious; 2-Moderate; 1-Slight; 0-Minimum

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Date: February 26, 2015	Date:

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