

MATERIAL SAFETY DATA SHEET

Section 1 Product Identification

MANUFACTURER: Morganite Crucible (India) Ltd.
ADDRESS: K-256, M.I.D.C, Waluj
 Aurangabad, Maharashtra, India

EMERGENCY PHONE NUMBER:

PRODUCT NAME: DIE SLICK® -GHI
PRODUCT TYPE: Die lubricant preparation
PREPARED BY: Product Manager
DATE OF ISSUE: September 2, 2011
SUPERCEDES: -----

Section 2 Product Composition/Information on Ingredients

INGREDIENT:	% wt	CAS NO:	LC/50 & LD/50 Route, Species
Modified Ester		Proprietary	See Section 11
Mineral Oil		64742-01-4	See Section 11
High Molecular Weight Alkane		68441-17-8	See Section 11
High Temperature Polymer		68037-67-3	See Section 11
Non-ionic Emulsifiers		9007-96-0	See Section 11
Propylene Glycol		57-55-6	See Section 11
Water			
Biocide		Proprietary	

Section 3 Hazards Identification

Routes of entry:

Skin Contact..... Prolonged contact may cause slight irritation with itching and local redness

Skin Absorption..... No evidence of harmful, effects from available information

Eye Contact..... May cause irritation, experience as stinging with blinking and tear production. Excess redness and swelling may occur.

Inhalation..... Mist may cause irritation of the nasal and respiratory tract.

Ingestion..... Signs and symptoms may include pain or discomfort in the mouth, throat, chest and abdomen.

Effects of acute exposure..... Prolonged or frequent contact may cause skin and eye irritation. Inhalation of mists/vapors may cause respiratory irritation.

Effects of chronic exposure..... Not Determined

Section 4 First Aid Measures

Instructions.....

Eye Contact. Flush eyes with large amounts of running water for at least 15 min. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Remove any contact lenses. Seek medical attention.

Inhalation. In case of inhalation, remove to fresh air. Aid in breathing, if necessary. Consult a physician.

Skin Contact. Remove any contaminated clothing and wash affected area with plenty of soap and water. If irritation persists, get medical attention.

Ingestion. Never give anything by mouth if the victim is unconscious. Do not induce vomiting without medical advise. Consult a physician.

ISO 9001: 2008

Morganite Crucible (India) Ltd.**Section 5 Fire Fighting Measures**

Flammability.....	N.Ap. contains around 80% water.
Extinguishing Media.....	All purpose foam, carbon dioxide, dry chemical media, sand or earth
Special Procedures.....	Do not spray water or foam directly into burning material, as spattering may occur which can spread the fire. Wear full protective equipment including a self-contained breathing apparatus.
Flash Point (C), Method.....	N.D.
Auto Ignition Temperature.....	N.D.
Upper flammable limit (% by vol.)	Not Established
Lower flammable limit (% by vol.)	Not Established
Explosion Data	
Explosive Power.....	Not Applicable
Rate of Burning.....	N.Av.
Sensitivity to static.....	N.Av.
Sensitivity to impact.....	Not Applicable
Unusual fire and explosion.....	During a fire, oxides of nitrogen and carbon may be evolved
Hazardous combustion products....	Burning can produce, carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Oxides of carbon and nitrogen. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

Section 6 Accidental Release Measures

Leak/Spill.....	As with any other industrial lubricating oils, use oil-binding agents. Spills or leaks may cause slippery conditions. Small Spills: Soak in absorbent granules or sand and dispose according to all applicable Federal, State and Local regulations. Large Spills: Bind using absorbent granules, sand or earth. Reclaim liquid directly or soak in an absorbent medium, and transfer to a suitable, marked container. This product is non-hazardous waste when spilled or disposed of, as defined in Resource Recovery Act (RCRA) regulations (40 CFR 261). Dispose according to all applicable Federal, State and Local regulations.
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Section 7 Handling and Storage

Handling procedure and equipment.....	Do not swallow. Avoid contact with, skin, and clothing. Wear protective equipment during handling. Use adequate ventilation. Maintain a good personal hygiene. Wash thoroughly after handling. Contact MORGANMMS for specific recommendations.
Storage needs.....	Keep away from incompatible materials. If frozen thaw and mix before sampling or using. Keep container tightly closed when not in use. Store in dry conditions protected from frost and elevated temperature. Avoid heat and sources of ignition. Store in original container or other mild steel or high-density polyethylene containers, which are closable and clearly labeled.

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Section 8 Exposure Controls/Personal Protection

Gloves/Type.....	Impervious gloves, such as nitrile gloves are recommended when handling product concentrate
Respiratory/Type.....	General ventilation should be adequate. If a lot of mist is generated local ventilation may be required
Eye/Type.....	Mono-goggles or safety glasses recommended
Footwear/Type.....	Chemical resistant boots
Clothing/Type.....	Wear an apron and/or an overall
Other/Type.....	Eye bath
Engineering Controls.....	When used in applications generating high levels of mist, operator exposure can be minimized by proper ventilation, use of mist collectors or splashguards as appropriate. If there is doubt about actual mist levels present, monitoring should be conducted
Additional Information.....	Adopt normal good working practices and personal hygiene standards. Wash hands after use, before eating, drinking, or smoking, and before and after using the toilet. Contaminated clothing should be laundered before re-use.

Section 9 Physical and Chemical Properties

Physical State.....	Whitish liquid
Odor.....	Mild odor
Odor Threshold.....	N.Av.
Vapor Pressure (mmHg).....	Like water
Vapor Density (Air =1).....	N.D.
Evaporation Rate.....	1.0
Freezing Point.....	<0C
Molecular wt.....	N.Ap.
Percent Volatile.....	N.D.
Boiling Point.....	760 mm Hg – 212 F
pH.....	8.0-9.0
Specific Gravity.....	0.98 @ 20C
Solubility in water.....	Complete
Coefficient of water/oil dist.....	N.D.

Section 10 Stability and Reactivity

Chemical Stability	Stable
Yes.....	
No, which conditions?.....	None
Substances:	
Yes	
No, which ones?.....	Oxidizing agents (i.e. chlorates, peroxides), strong acids, and strong bases.
Reactivity Conditions.....	None
Hazardous products of decomposition	See hazardous combustion products
Hazardous polymerization.....	Will not occur

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Section 11 Toxicological Information

Routes of Entry.....	Ingestion. Skin and eye contact. Inhalation if mists, vapor or airborne particulates are generated.
Effects of Acute Exposure.....	Inhalation: The product is unlikely to present any significant inhalation hazard at ambient temperatures. Ingestion: The product has a low order of acute oral toxicity – ingestion is not regarded as a significant health hazard likely to arise in normal use. Swallowing significant quantities may cause discomfort, nausea, irritation of digestive tract, and diarrhea
Effects of Chronic Exposure.....	There are no reports of long-term adverse toxic effects in man attributable to the use of this type of product.
LD50 of Material.....	102-71-6 Oral, rat: LD50 = 8.0 g/kg 1310-58-3 – N.Av. 6834-92-0 Oral, rat: LD50 = 420-920 mg/Kg 4719-04-4 Oral, rat: LD50 = 535-580 mg/Kg
LC50 of Material.....	102-71-6 Toxicity to fish Fathead Minnow: 96h LC50 = 6645 mg/l 1310-58-3 – N.Av. 6834-92-0 – N.Av.
Carcinogenicity of Material.....	No effects are known from the use of this type of product
Reproductive Effects.....	No effects are known from the use of this type of product
Irritancy of Material.....	Eyes: Eye contact can cause strong irritation and stinging. Skin: The product may cause irritation in contact with the skin. This may become more intense if the material is not promptly removed or if contact is frequent or prolonged.
Sensitizing capability of Material...	None expected
Tetratogenicity.....	N.D.
Mutagenicity.....	N.D.
Other Information.....	N.Av.
Additional comments.....	None
Synergistic Materials.....	N.D.
Exposure Limits.....	N.D.

Section 12 Ecological Considerations

Ecotoxicity.....	N.Av.
Environmental Fate.....	N.Av.

Section 13 Disposal Considerations

Waste Disposal.....	Wastes must be tested using methods described in 40 CFR 261 to determine if it meets applicable definitions of hazardous waste. No EPA waste numbers are applicable for this product’s components. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
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Section 14 Transportation Information

Dot Classification.....	Not a DOT controlled material
Proper Shipping Name.....	Not regulated by this mode of transportation
TDG Classification.....	Not Regulated
UN Number	Not Applicable
DOT Identification Number.....	None
Packing Group.....	None
Hazardous Substances Reportable Quantity.....	N.Av.
Special Provisions for Transportation.....	None
Additional Shipping Information...	N.D.
International Transportation Regulations.....	N.D.

Section 15 Regulatory Information

Federal and State Regulations ...	<p>OSHA: Not hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)</p> <p>SARA TITLE III</p> <p>SARA Section 302 (40 CFR 355 Appendix A): None of this product's components are listed;</p> <p>SARA Section 311/312: None;</p> <p>SARA Section 313 (40 CFR 372.65) None of this product's components are listed;</p> <p>CERCLA (40 CFR 302.4) None of the product's components are listed;</p> <p>RCRA: Not Listed</p> <p>TSCA Inventory: All of this product's components are listed.</p> <p>International Inventories: All of this product's components are on or exempt from these inventories: Canada DSL, EINECS, Australia, Japan, China, Korea, and the Philippines.</p> <p>State Lists: None of this products components are listed in CA, FL, MA, MN, NJ, or PA</p> <p>This product does not contain any chemicals List of Known Carcinogens and Reproductive Toxins</p>
WHMIS Classification.....	D2B
CPR Compliance.....	Yes
DIE SLICK -GHI has been classified in accordance to the controlled product regulation and the MSDS contains all the information required by the CPR.	

DIE SLICK -GHI does not contain any ingredients listed on the SARA Title III, Section 313 List of Chemicals. DIE SLICK -GHI, as sold, does not meet the criteria of a hazardous waste as defined under 40CFR 261, in that it does not exhibit the characteristics of a hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D. It is the end user's responsibility to determine the regulatory status of the waste at the time of disposal.

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Section 16 Other Information

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists
ANSI = American National Standards Institute
ASTM = American Society for Testing and Materials
CERCLA = Comprehensive Environmental Response and Liability Act
DOT = Department of Transportation
EPA = Environmental Protection Agency
IARC = International Agency for Research on Cancer
LD = Lethal Dose
NIOSH = National Institute of Occupational Health and Safety
NTP = National Toxicology Program
OSHA = Occupational Safety and Health Administration
PEL = Permissible Exposure Limit
SARA = Superfund Amendments and Reauthorization Act
TLV = Threshold Limit Value
TSCA = Toxic Substance Control Act
N.D. = Not Determined
N.Av. = Not Available
N.Ap. = Not Applicable

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