SAFETY DATA SHEET

Date Prepared : 04/23/2015
SDS No : 0023-04-2015F KUBOTA
Date-Revised : 06/24/2015
Revision No : 1

KUBOTA GREY SILICONE GASKET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: KUBOTA GREY SILICONE GASKET
PRODUCT DESCRIPTION: Hi-Temp. Silicone Liquid Gasket
PRODUCT CODE: 70000-73764

DISTRIBUTOR
ThreeBond International, Inc.
6184 Schumacher Park Drive
West Chester, OH 45069
Emergency Phone: (513) 779-7300

24 HR. EMERGENCY TELEPHONE NUMBERS
CHEMTREC (Domestic North America):(800) 424 - 9300
CHEMTREC (International):(703) 527 - 3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Sensitization, Category 1B
Serious eye damage/Eye irritation, Category 1
Specific target organ toxicity after repeated exposure: (Hematopoietic System, central nervous system), Category 2
Reproductive Toxicity, Category 2

Environmental:

Acute Hazards to the Aquatic Environment, Category 2
Chronic Hazards to the Aquatic Environment, Category 2

GHS LABEL


Exclamation mark


Corrosion


Health hazard


Environment

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H317: May cause an allergic skin reaction.
H410: Very toxic to aquatic life with long lasting effects.
H373: May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H318: Causes serious eye damage.
H361: Suspected of damaging fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H371: May cause damage to organs (or state all organs affected, if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H411: Toxic to aquatic life with long lasting effects.

H401: Toxic to aquatic life.

Precautionary statement(s)

Prevention:

P264: Wash hands and/or skin thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.

Response:

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P321: Specific treatment (see Response on this label).
P362+P364: Take off contaminated clothing and wash it before reuse.
P391: Collect spillage.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER/Doctor/Medical Professional
P302+P352: IF ON SKIN: Wash with plenty of water
P308+P311: IF exposed or concerned: Call a POISON CENTER/Doctor/Medical Professional
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash hands and/or skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to appropriate facility according to local regulations

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Paste

IMMEDIATE CONCERNS: Causes irritation or damage to eyes

POTENTIAL HEALTH EFFECTS

EYES: Direct contact may cause slight irritation with redness and swelling.

SKIN: Repeated or prolonged contact with skin may cause slight irritation leading to dermatitis. Product contains oximes which are possible skin sensitizers.

SKIN ABSORPTION: Remove product from skin.

INGESTION: Small amounts should not cause injury. Swallowing large amounts may cause slight injury.

CARCINOGENICITY: Suspected of causing cancer. [MEKO]. The following material (Crystalline silica, Titanium dioxide) is **embedded (bound)** in the product and not available as respiratory dusts. When used as intended or as supplied, the product will not pose hazards.

ROUTES OF ENTRY: Eyes, skin, inhalation, ingestion or absorption

SENSITIZATION: Sensitization possible through skin contact.

HEALTH HAZARDS: Coughing. Dermatitis. Rash. Upper respiratory tract irritation. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause an allergic skin reaction.

COMMENTS: Methyl ethyl ketoxime (MEKO) is formed upon contact with water or humid air. Male rodents exposed to

MEKO vapor throughout their lifetime developed liver cancer. But relevance to humans is uncertain now.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Silicone resin	50 - 60	
Zinc compound	25 - 35	
Silica	5 - 15	
Toluene	< 2.2	108-88-3
Methyl ethyl ketoxime (Impurity)	< 1	96-29-7

COMMENTS: Methyl ethyl ketoxime (MEKO #96-29-7): cracked gas

4. FIRST AID MEASURES

EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, then get medical advice, attention.

SKIN: Remove any contaminated clothing and flush the affected area of the skin thoroughly with plenty of water. Followed by washing with soap and water. get medical attention if irritation persists. Do not reuse contaminated clothing until properly cleaned.

INGESTION: Immediately rinse mouth well with water and seek medical treatment.

INHALATION: Remove to fresh air. Get medical attention if ill effects occur.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes serious eye damage.

SKIN: May cause an allergic skin reaction.

INGESTION: Expected to be a low ingestion hazard.

INHALATION: No adverse effects due to inhalation are expected.

ACUTE TOXICITY: No data as a product

CHRONIC EFFECTS: Oximes may cause skin sensitization. Overexposure to vapors may cause drowsiness, blood and liver injury, and may irritate eyes, nose, and throat.

NOTES TO PHYSICIAN: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

COMMENTS: *After first aid, get appropriate in-plant, paramedic, or community medical support.*

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: By heating and fire, harmful vapors/gases may be formed. Nitrogen oxides. (corrosive)

EXTINGUISHING MEDIA: Use carbon dioxide, dry chemical powder, foam or water fog.

OTHER CONSIDERATIONS: By heating and fire, harmful vapors/gases may be formed. Nitrogen oxides. (corrosive)

FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

FIRE FIGHTING EQUIPMENT: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode/flame retardant coat/helmet/gloves/rubber boots.

FIRE EXPLOSION: No unusual fire or explosion hazards noted

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: carbon oxides and traces of incompletely burned carbon compounds, metal oxides, silicon dioxide, nitrogen oxides, and formaldehye.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb with dry sand, soil, sawdust, cloth, etc., then place in a sealable container.

LARGE SPILL: Dike and prevent overflow. Guide to a safe place then dispose properly.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not allow product to flow into rivers or affect the environment

GENERAL PROCEDURES: All ignition sources should be quickly removed (No smoking in the vicinity, prohibit sparks or fire sources)

RELEASE NOTES: Keep spilled material from entering storm drains, sewers, or other environmental mediums.

SPECIAL PROTECTIVE EQUIPMENT: Wear appropriate personal protection equipment to avoid contact to eyes, skin, and inhalation.

COMMENTS: Disposal of clean-up materials may be governmentally regulated. Observe all applicable local, state, and federal waste management regulations.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Take precaution against fire.

HANDLING: Avoid contact with eyes and skin. Wear appropriate personal protection. Wash thoroughly after handling. Avoid prolonged exposure.

STORAGE: Keep container closed and away from water or moisture

STORAGE TEMPERATURE: 0°C Minimum to 30°C Maximum

COMMENTS: Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full. Do not mix this product with other cleaning agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		**ppm**	**mg/m³**	**ppm**	**mg/m³**
Toluene	**TWA**	100 ppm		50 ppm	
	STEL	150 ppm	375 mg/m3		

ENGINEERING CONTROLS: Provide general or local ventilation systems to maintain airborne concentrations below OSHA PELs. Local ventilation is preferred because contaminant dispersion into the work area by controlling it at its source.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses. Wear splash goggles if the potential for splashing or spraying exists.

SKIN: Wear personal protection aprons, boots, Gloves (impervious) if necessary. Do not work with short sleeve shirts.

RESPIRATORY: Respiration protection must be worn whenever the WEL levels have been exceeded. Use filter type A according to EN 14387.

PROTECTIVE CLOTHING: Wear solvent resistant or other impervious gloves

WORK HYGIENIC PRACTICES: Wash hands before eating, smoking, or using restroom. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Paste

ODOR: Oxime

ODOR THRESHOLD: No information available

APPEARANCE: Gray paste.

COLOR: Gray

pH: Not Available

PERCENT VOLATILE: Not Applicable

FLASHPOINT AND METHOD: > 40°C (104°F) Closed Cup

Notes: Does not sustain combustion.

FLAMMABLE LIMITS: No information available

AUTOIGNITION TEMPERATURE: Not determined.

VAPOR PRESSURE: Negligible (25° C)

VAPOR DENSITY: > 1 (Air = 1)

BOILING POINT: Not Applicable

FREEZING POINT: Not Applicable

MELTING POINT: Not Applicable

THERMAL DECOMPOSITION: No information available

SOLUBILITY IN WATER: Not soluble

EVAPORATION RATE: less than 1 (Butyl acetate=1)

DENSITY: Relative Density (at 23 deg C):1.4

SPECIFIC GRAVITY: at 4°C

VISCOSITY #1: to 104 Pa·s at 23°C

(VOC): < 2.500 % EPA Method 24, Weight Loss Determination

COEFF. OIL/WATER: No information available

10. STABILITY AND REACTIVITY

REACTIVITY: No information available

HAZARDOUS POLYMERIZATION: Polymerization will not occur

STABILITY: Stable at room temperature in closed containers under normal storage and handling conditions.

CONDITIONS TO AVOID: None known.

POSSIBILITY OF HAZARDOUS REACTIONS: Contact with water, moisture, or humid air causes curing and MEKO vapors to form gradually.

HAZARDOUS DECOMPOSITION PRODUCTS: This product reacts with water, moisture or humid air to evolve following compounds: Acetone

Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicone dioxide. Nitrogen oxides. Formaldehyde.

INCOMPATIBLE MATERIALS: Strong oxidizing agents. Water, moisture

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD_{50} (rat)	DERMAL LD_{50} (rabbit)	INHALATION LC_{50} (rat)
Toluene	5580 rat (mg/kg)	12198 Rabbit/mg/kg	12500 to 28800 mg/m3 (rat)

DERMAL LD_{50}: > 1000 mg/kg (MEKO) rabbit male and female

ORAL LD_{50}: > 900 ml/kg (rat) (MEKO Decomposition product)

INHALATION LC_{50}: > 4.83 mg/l (rat)(MEKO decomposition product)

EYE EFFECTS: May cause serious damage to eyes.

SKIN EFFECTS: Exposure to the product causes irritation to the skin with redness, pain and dryness..

CHRONIC: No data as a product

CARCINOGENICITY

IARC: Monographs

Iron oxide 3 Not classifiable as a carcinogenicity to humans

OSHA: Not Listed

SENSITIZATION: May cause an allergic skin reaction.

REPRODUCTIVE EFFECTS: Not available

TARGET ORGANS: May cause damage to the following organs through prolonged or repeated exposure: Cardiovasular/Hematological: hematopoiesis. 2-Butanone, O, O',O''-(ethenylsilylidyne) trioxime

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No information available

ECOTOXICOLOGICAL INFORMATION: Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. [Zinc compounds]

Harmful to aquatic life [Methylethylketoxime]

BIOACCUMULATION/ACCUMULATION: No information available

AQUATIC TOXICITY (ACUTE): ThreeBond1216 (CAS Mixture)

48-HOUR EC_{50}: 464.23 mg/l (daphnia) As a product

96-HOUR EC_{50}: 914 mg/l

Notes: Toluene (CAS 108-88-3)

Acute: EC50 Water flea (Daphnia magna) 5.46-9.83= mg/l, 48 hours

LC50 Coho salmon, silver salmon= 5.5 mg/l, 48 hr

LC50 Fathead minnow= 777-914 mg/l98 hr

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your licensed waste contractor for detailed recommendations.

EMPTY CONTAINER: All containers should be thoroughly emptied before disposal.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Enviromental hazardous substance, solids, n.o.s. (Zinc oxide)

PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: UN3077

PACKING GROUP: III

MARINE POLLUTANT #1: P

OTHER SHIPPING INFORMATION: This product is not intended to be transported in bulk.

AIR (ICAO/IATA)

SHIPPING NAME: Enviromental hazardous substance, solids, n.o.s. (Zinc oxide)

UN/NA NUMBER: UN3077

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

ERG: 9L

NOTE: Follows ICAO/IATA regulation

VESSEL (IMO/IMDG)

SHIPPING NAME: Enviromental hazardous substance, solids, n.o.s. (Zinc oxide)

UN/NA NUMBER: UN3077

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

EmS: F-A, S-F

MARINE POLLUTANT #1: P

15. REGULATORY INFORMATION

UNITED STATES

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%
Toluene	< 2.2

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All chemical substances in this material are included on or exempted from listing on the

TSCA Inventory of Chemical Substances.

TSCA STATUS: All ingredients are in compliance with the TSCA

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS: Not Listed

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Toluene	This product contains a component or components listed on the Massachusetts Right to Know list of hazardous substances. This product contains a component or components listed on the Michigan Critical Materials list. This product contains a component or components listed on the New Jersey Right to Know list of hazardous chemicals. This product contains a component or components listed on the Pennsylvania Right to Know list of hazardous substances.

CALIFORNIA PROPOSITION 65: WARNING: This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Silica (bound), Toluene)

Chemical Name	Wt.%	Listed
Toluene	< 2.2	• Developmental Toxicity

16. OTHER INFORMATION

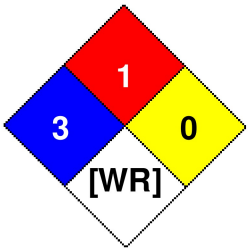
Date-Revised: 06/24/2015

REVISION SUMMARY: This MSDS replaces the 04/23/2015 MSDS. Revised: **Section 9:** COEFF. OIL/WATER, FLAMMABLE LIMITS, ODOR THRESHOLD, THERMAL DECOMPOSITION. **Section 10:** STABLE.

HMIS RATING

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		C

NFPA CODES



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