To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrantee or guarantee the information. We provide vendor SDSs in accordance with the requirements of the OSHA Hazard Communication Standard in order to assist our customers in their compliance efforts. We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Compliance Services
Zep Inc.

SAFETY DATA SHEET

Date Prepared : 11/17/2015
SDS No : 0017-11-2015 TOYOTA

TOYOTA 1217H Liquid Gasket

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TOYOTA 1217H Liquid Gasket
PRODUCT DESCRIPTION: Liquid Gasket
PRODUCT CODE: 1217H

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), Category 2

GHS LABEL


Exclamation mark


Health hazard


Corrosion

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.
H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary statement(s)

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.

Response:

P302+P352: IF ON SKIN: Wash with plenty of water/...
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.
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
P314: Get medical advice/attention if you feel unwell.

Disposal:

P501: Dispose of contents/container to appropriate facility in accordance with local regulations

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Gray paste

IMMEDIATE CONCERNS: Causes irritation or damage to eyes

POTENTIAL HEALTH EFFECTS

EYES: Corrosive to the eyes and may cause severe damage including blindness.

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

SKIN ABSORPTION: MEKO: May be harmful if absorbed through the skin.

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

INHALATION: Overexposure to vapors may cause drowsiness may cause drowsiness, blood and liver injury, and may irritate eyes, nose and throat.

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. Additional testing is being planned by the MEKO supplier to determine any relevance to humans. Until more data is known, exposure levels should be maintained as low as achievable. Also, this product contains crystalline silica, fumed silica, titanium dioxide, Carbon black which are considered a hazard by inhalation with dust. Crystalline silica is classified as an agent which is a probable carcinogen in humans. But, this product does not fall under the dust inhalation hazard or the carcinogen classification since it does not generate dust under normal handling conditions.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Calcium carbonate	40 - 50	471-34-1
2-Butanone, O, O', O"-(ethenylsilylidyne) trioxime	< 5	2224-33-1
Silane, dichloromethyl-,reaction products with silica	1 - 2	68611-44-9
Toluene	< 1	108-88-3
Poly[oxy(methyl-1,2-ehtanediyl)], a-[3-[methylbis[(1methylethenyl)oxy]silypropyl]-w-[3-[methylbis[(1-methylethenyl)oxy]silyl]propoxyl]-	< 0.5	76735-64-3
Carbon black	< 0.1	1333-86-4

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

4. FIRST AID MEASURES

EYES: Immediately flush with water for 15 minutes.

SKIN: Remove from skin and immediately flush with water for 15 minutes. Get medical attention if irritation or ill effects develop.

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 EFFECTS: 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 unsual 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**
Calcium carbonate	**TWA**		mg/m3		
	STEL	Not Established	Not Established	Not Established	
2-Butanone, O, O', O"-(ethenylsilylidyne) trioxime	**TWA**	[1]	[1]		
Silane, dichloromethyl-,reaction products with silica	**TWA**		mg/m^3 (total dust)		mg/m^3
	STEL	Not Established		Not Established	
Toluene	**TWA**	100 ppm	375 mg/m3	20 ppm	
	STEL	150 ppm	560 mg/m3		
Carbon black	**TWA**	[2]	3.5 mg/m3 [2]		(3.5) mg/m^3

OSHA TABLE COMMENTS:
1. See: Methyl Ethyl Ketoxime (MEKO) data.
2. Inhalable fraction

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.

COMMENTS: Product generates methyl ethyl ketoxime (MEKO) upon contact with water or humid air.
MEKO exposure limits: TWA, 3 ppm from Vendor Guide (United States)
AIHA TWA, 10 ppm, STEL, 10 ppm (Workplace Environmental Exposure Level, United States)

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid
ODOR: Oxime
ODOR THRESHOLD: No information available
APPEARANCE: Gray paste.
pH: Not Available
PERCENT VOLATILE: Not Applicable
FLASHPOINT AND METHOD: 73°C (163.4°F) Closed Cup

Notes: Does not sustain combustion.
FLAMMABLE LIMITS: No information available
AUTOIGNITION TEMPERATURE: No data available
VAPOR PRESSURE: Negligible (25° C)
VAPOR DENSITY: > 1 (Air = 1)
BOILING POINT: Not Applicable
FREEZING POINT: Not Determined
MELTING POINT: Not Determined
SOLUBILITY IN WATER: Not soluble
PARTITION COEFFICIENT: N-OCTANOL/WATER: No information available
EVAPORATION RATE: less than 1 (Butyl acetate=1)
DENSITY: No information available
VISCOSITY #1: to 275 Pa·s at 23°C
(VOC): < 2.500 % EPA Method 24, Weight Loss Determination

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: Water, moisture, or humid air can cause Methyl ethyl ketoxime. 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, 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)	12196 Rabbit/mg/kg	12500 to 28800 mg/m3 (rat)
Carbon black	> 8000 rat (mg/kg)	3000 Rabbit/mg/kg	

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)
NOTES: Severe eye irritation. Symptoms may include stinging/pain, tearing, redness, swelling, and blurred vision.
EYE EFFECTS: Causes serious eye damage
SKIN EFFECTS: May cause an allergic skin reaction
CHRONIC: No data as a product
CARCINOGENICITY

Chemical Name	IARC Status	Other	General Toxicity
Toluene	3		Contains component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP
Carbon black	2B	ACGIH: A4	

IARC: Overall Evaluation of Carcinogenicity:

Carbon black dust (CAS# 1333-86-4) 2B Possibly carginogenic to humans

Crystalline silica dust (68611-44-9) 1 Carcinogenic to humans

Toluene (CAS# 108-86-3) 3 Not classified as to carcinogenicity to humans

OSHA: Not Listed

REPRODUCTIVE EFFECTS: Not available

TARGET ORGANS: Male rodents exposed to Methyl ethyl ketoxime (MEKO) vapors at high concentration throughout their lifetime developed liver cancer. But relevance to humans is uncertain now.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No information available

ECOTOXICOLOGICAL INFORMATION: No information available

BIOACCUMULATION/ACCUMULATION: No information available

AQUATIC TOXICITY (ACUTE): Methyl ethyl ketoxime (CAS #96-29-7)

48-HOUR EC_{50}: > 1000 mg/l, 48 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.

PRODUCT DISPOSAL: ThreeBond1217H is a non-hazardous substance per DOT and EPA

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

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not restricted by DOT

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

AIR (ICAO/IATA): Not an IATA controlled material

VESSEL (IMO/IMDG): Not an IMDG controlled material.

15. REGULATORY INFORMATION

UNITED STATES

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%
Toluene	< 1

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.
Carbon black	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 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.

Chemical Name	Wt.%	Listed
Toluene	< 1	• Developmental Toxicity
Carbon black	< 0.1	Cancer

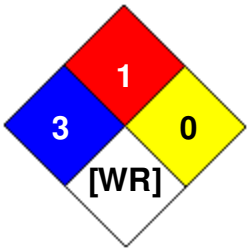
16. OTHER INFORMATION

Date Prepared: 11/17/2015

HMIS RATING

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		C

NFPA CODES



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