SAFETY DATA SHEET

Date Prepared : 04/07/2015
SDS No : 0007-04-2015 (US)
Date-Revised : 10/26/2017
Revision No : 10

ThreeBond 1217H

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ThreeBond 1217H
PRODUCT DESCRIPTION: One component silicone rubber compound
PRODUCT CODE: ThreeBond 1217H

MANUFACTURER

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 (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).

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 ... 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/...

P314: Get medical advice/attention if you feel unwell.

Disposal:

P501: Dispose of contents/container to ...

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 (68611-44-9, 1333-86-4) 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.

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 reaction substance with silica, Carbon black which are considered a hazard by inhalation with dust. 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
Siloxanes and silicones, di-Me, hydroxy-terminated	40 - 50	70131-67-8
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 - 5	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: No specific precautions or incompatibilities.

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			
Chemical Name	**Type**		**ppm**	**mg/m³**
Calcium carbonate	**OSHA PEL**	**TWA**		mg/m3
		STEL	Not Established	Not Established
	ACGIH TLV	**STEL**	Not Established	
2-Butanone, O, O', O"-(ethenylsilylidyne) trioxime	**OSHA PEL**	**TWA**	[1]	[1]
Silane, dichloromethyl-,reaction products with silica	**OSHA PEL**	**TWA**		mg/m³ (total dust)
		STEL	Not Established	
	ACGIH TLV	**TWA**		mg/m³
		STEL	Not Established	
Toluene	**OSHA PEL**	**TWA**	100 ppm	375 mg/m3
		STEL	150 ppm	560 mg/m3
	ACGIH TLV	**TWA**	20 ppm	
Carbon black	**OSHA PEL**	**TWA**	[2]	3.5 mg/m3 [2]
	ACGIH TLV	**TWA**		(3.5) mg/m³
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): < 2.5 % 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 TOXICITY

Chemical Name	ORAL LD_{50} (rat)	DERMAL LD_{50} (rabbit)	INHALATION LC_{50} (rat)
Siloxanes and silicones, di-Me, hydroxy-terminated	> 40000 rat - mouse (mg/kg)		0.535 mg/L
Toluene	2600 mg/kg (rat)	12000 mg/kg (rabbit)	12.5 mg/L, 4 hrs (Rat)
Carbon black	> 15400 mg/kg (rat)	> 3 g/kg (Rabbit)	

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.

CARCINOGENICITY

Chemical Name	IARC Status	General Toxicity
Toluene	3	Contains component that is not classifiable as to its carcinogenicity based on its IARC

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# 108-88-3) 3 Not classified as to carcinogenicity to humans

OSHA: Not Listed

REPRODUCTIVE TOXICITY: Not available

STOT-SINGLE EXPOSURE: 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.%	CERCLA RQ
Toluene	< 1	1000

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. Carbon Black (bound), Silica (bound), Toluene <1.0%)

Chemical Name	Wt.%	Listed
Toluene	< 1	Developmental Toxicity

MEXICO This Safety Data Sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000)

16. OTHER INFORMATION

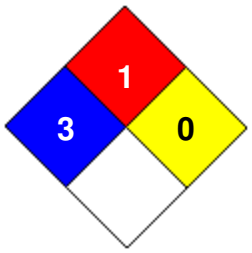
Date-Revised: 10/26/2017

REVISION SUMMARY: This MSDS replaces the 10/06/2017 MSDS. Revised: **Section 3:** Wt.%.

HMIS RATING

HEALTH	*	3
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		C

NFPA CODES



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