

J.B.CHEMICAL CO., INC.

SAFETY DATA SHEET Heavy Duty Compound

SDS No: 1036-1

Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013)

Date of last Revision: 08/19/2014

1. Identification of the substance or mixture and of the supplier

1.1 Product identifier used on the label: Heavy Duty Compound

1.2 Other means of identification: Not Applicable

1.3 Recommended use of the chemical and restrictions on use: A highly aggressive automotive compound. This material should not be used for any other purpose than that recommended without expert advice.

1.4 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

J.B.Chemical Co., Inc.
14803 S. Spring Street
Gardena, CA 90248, USA
310-532-3021
800-522-2468

1.5 Emergency phone numbers:

J.B.Chemical Co., Inc.: (310) 532-3021, (800) 522-2468 Monday - Friday, 7:00am - 3:00pm PST
Chemtrec: (800) 424-9300 - Outside the continental U.S.: (703) 527-3887 24 Hours

2. Hazard(s) identification

2.1 Classification of the chemical in accordance with 29 CFR 1910.1200(d) and GHS Rev.5th e.2013:

This product is classified as hazardous.

Flammable Liquid Category 4

Carcinogen Category 1A

Eye Irritation Category 2

Skin Irritation Category 3

Specific Target Organ Toxicity Single Exposure Category 3 (Central Nervous System)

Specific Target Organ Toxicity Repeated Exposure Category 1 (Lungs)

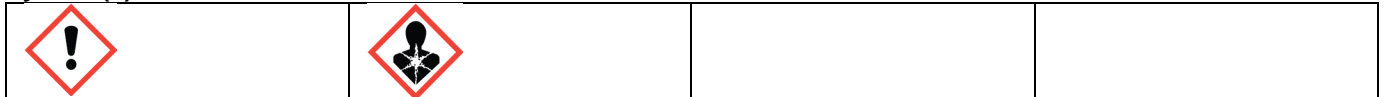
2.2 Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with 29 CFR 1910.1200(f) and GHS Rev.5th e.2013:

Signal word: Danger

Hazard statement(s):

- **Physical Hazards:** H227: Combustible liquid.
- **Health Hazards:** H316: Causes mild skin irritation.
H320: Cause eye irritation.
H336: May cause drowsiness or dizziness (Central Nervous System).
H350: May cause cancer through prolonged or repeated inhalation of dust.
H372: Causes damage to lungs through prolonged or repeated inhalation of dust.

Symbol(s):



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Precautionary statement(s):

Prevention:

P102: Keep out of reach of children.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P280: Wear protective gloves/ eye protection/ half-face air-purifying filter respirator suitable for organic vapors and particulates (P95).

P264: Wash hands and eyes thoroughly after handling.

P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/eye protection.

Response:

P305+P351+P338: If in EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical advice/attention.

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

P370+P378: In case of fire; Use water spray, carbon dioxide, dry chemical or alcohol foam for extinction.

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with CERCLA/CWA (Section 311)/SARA Title III Regulations.

2.3 Describe any hazards not otherwise classified that have been identified during the classification process

Repeated exposure may cause skin dryness and cracking.

2.4 Where an ingredient with unknown acute toxicity is used in a mixture at a concentration $\geq 1\%$ and the mixture is not classified based on testing of the mixture as a whole, a statement that X% of the mixture consists of ingredient(s) of unknown acute toxicity is required: Not Applicable

3.Composition/ information on ingredients

Chemical name	CAS No.	EC No.	Concentration (Wt%)	Classification 29 CFR 1910.1200(d)/GHS
Naphtha (Petroleum), Heavy Aliphatic	64742-96-7	265-200-4	5.00-20.00	Asp Tox.1 H304 Flam Liq.4 H227 Skin Irrit.3 H316 STOT SE3 H336
Nonylphenol polyethylene glycol ether	127087-87-0	500-315-8	1.00-2.00	Acute Tox.4 H302 Acute Tox.3 H311 Eye Irrit.2 H319

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SDS No: 1036-1

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Microcrystalline silica	1317-95-9	Not available	≤35.00	Aquatic Chronic.2 H411 STOT RE1 H372 Carc 1A H335 Eye Irrit.2 H320
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4. First-aid measures

4.1 Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion.

- **Inhalation:** If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, get medical attention.
- **Skin contact:** Clean affected areas with mild soap and water. Remove contaminated clothing, including shoes, and launder before reuse or discard. If any irritation persists, seek medical attention.
- **Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. If any irritation persists, get medical attention.
- **Ingestion:** Do not induce vomiting or give anything by mouth. If victim is drowsy or unconscious, place on the left side with head down. If possible, do not leave victim unattended. Get medical attention immediately. Potential for chemical pneumonitis.

4.2 Most important symptoms/effects, acute and delayed: Fever greater than 101° F (38° C), shortness of breath, chest congestion or continued coughing or wheezing, irritation of the nose and throat and signs of nervous system depression (e.g. headache, nausea, drowsiness, dizziness, fatigue, visual impairment, difficulty breathing, and loss of coordination).

4.3 Indication of immediate medical attention and special treatment needed, if necessary: Fever greater than 101° F (38° C), shortness of breath, chest congestion or continued coughing or wheezing.

5. Fire-fighting measures

5.1 Suitable (and unsuitable) extinguishing media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.

5.2 Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products): Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. The vapor is heavier than air, spreads along the ground and distant ignition is possible.

5.3 Special protective equipment and precautions for fire-fighters: Wear full protective clothing and self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures:

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. Wear protective equipment to prevent skin and eye contact and breathing in vapors. Remove all possible sources of ignition in the surrounding area. Shut off leaks, if possible without personal risks. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by

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using sand, earth, or other appropriate barriers. Attempt to disperse the vapor or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

6.2 Methods and materials for containment and cleaning up:

For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity (refer to Chapter 15) to the National Response Centre at (800) 424-8802. Under Section 311 of the Clean Water Act (CWA) this material is considered an oil. As such, spills into surface waters must be reported to the National Response Centre at (800) 424-8802. This material is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Petroleum Exclusion. Therefore, releases to the environment may not be reportable under CERCLA.

7. Handling and storage

7.1 Precautions for safe handling:

Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Handle an open container with care in a well-ventilated area. Ventilate work place in such a way that the Occupational Exposure Limit (OEL) is not exceeded. Do not empty into drains. Avoid handling above its flash point otherwise the product will form flammable/explosive vapor-air mixtures

7.2 Conditions for safe storage, including any incompatibilities:

For small containers, keep out of reach of children. Keep tightly closed and store in a cool and well ventilated area. Store only in approved containers and protect from physical damage. Storage should meet OSHA standards. Empty drums should be completely drained, properly bunged, and promptly shipped to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulation. Do not overheat; product will start boiling if heated above 200°F. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

8. Exposure controls/ personal protection

8.1 OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Component(s):

J.B.CHEMICAL CO., INC.

SAFETY DATA SHEET Heavy Duty Compound

SDS No: 1036-1

Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013)

Date of last Revision: 08/19/2014

Chemical name	Type	Exposure Limit values	Source
Naphtha (Petroleum), Heavy Aliphatic CAS No:64742-96-7	TWA (vapor,8 hr)	1200 mg/m ³	EU HSPA for similar solvent.
Nuisance dusts(Includes all inert and nuisance dust like Calcined Kaolin or Aluminum oxide)	TWA (8 hr)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)	OSHA PEL
Microcrystalline silica CAS No: 1317-95-9	TWA (8 hr)	0.05 mg/m ³ (respirable fraction)	NIOSH REL

* Reciprocal Calculation Procedure

8.2 Appropriate engineering controls: Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.3 Individual protection measures, such as personal protective equipment:

- **Eye/face protection:** Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended: Safety Glasses with side shields
- **Skin/hand protection:** Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Gloves made from the following material(s) are recommended: Nitrile rubber
- **Respiratory protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use and maintenance must be in accordance with regulatory requirements. If applicable, types of respirators to be considered for this material include: half-face air-purifying filter respirator suitable for organic vapors and particulates (P95).

9. Physical and chemical properties

Appearance (physical state, color, etc.):	Cream, brown color
Odor:	Grape scent
Odor threshold:	Not Determined
pH:	8.00-9.00
Melting point/freezing point:	Not Applicable
Initial boiling point and boiling range:	212 °F
Flash point:	>60°C(140°F)
Evaporation rate:	Not Determined
Flammability (solid, gas):	Not Applicable

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Upper/lower flammability or explosive limits:	Not Applicable
Vapor pressure:	Not Determined
Vapor density:	Not Determined
Relative density:	1.24 at 77°F (Water=1)
Solubility(ies):	Miscible in water
Partition coefficient: n-octanol/water:	Not Determined
Auto-ignition temperature:	Not Applicable
Decomposition temperature:	Not Applicable
Viscosity:	Not Determined

10.Stability and reactivity

- 10.1 Reactivity:** This material is considered to be non reactive under normal use conditions.
- 10.2 Chemical stability:** Stable.
- 10.3 Possibility of hazardous reactions:** Hazardous polymerization will not occur.
- 10.4 Conditions to avoid (e.g., static discharge, shock, or vibration):** Avoid heat, sparks, open flames and other ignition sources.
- 10.5 Incompatible materials:** Strong oxidizing agents.
- 10.6 Hazardous decomposition products:** Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11.Toxicological information

Description of the various toxicological (health) effects and the available data used to identify those effects, including:

- 11.1 Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):**
- **Inhalation:** Breathing of high vapor concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Do not breathe dust /fume/gas/mist/vapors/spray. Prolonged or repeated inhalation of crystalline silica causes damage to lungs.
 - **Ingestion:** May be harmful if swallowed and enters airways.
 - **Skin contact:** Direct prolonged or repeated contact may cause mild irritation. Repeated exposure may cause skin dryness and cracking.
 - **Eye contact:** Direct contact may cause mild eye irritation with redness and tearing.
- 11.2 Symptoms related to the physical, chemical and toxicological characteristics:** Not Determined
- 11.3 Delayed and immediate effects and also chronic effects from short- and long-term exposure:** See section 11.1.
- 11.4 Numerical measures of toxicity (such as acute toxicity estimates):** Not determined on the mixture.

Acute toxicity

Name (Components)	Route	Species	Value
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7	Dermal	Rat	LD50>2000 mg/kg

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SDS No: 1036-1

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Date of last Revision: 08/19/2014

“	Ingestion	Rat	LD50>2000 mg/kg
“	Inhalation-vapor (4 hours)	Rat	Low toxicity (Shell)
Nonylphenol polyethylene glycol ether CAS No:127087-87-0	Dermal	Rabbit	LD50>1000 mg/m3
“	Ingestion	Rat	LD50>500 mg/kg
“	Inhalation-aerosol (4 hours)	Rat	LD50>1.15 mg/l

Skin Corrosion/Irritation

Name (Components)	Species	Value
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7		May cause moderate skin irritation (but insufficient to classify).
Nonylphenol polyethylene glycol ether CAS No:127087-87-0		Prolonged contact may cause slight irritation with local redness.

Serious Eye Damage/Irritation

Name (Components)	Species	Value
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7		Essentially non-irritating to eyes
Nonylphenol polyethylene glycol ether CAS No:127087-87-0		Causes severe eye irritation. May cause severe corneal injury.

Respiratory or skin sensitization

Name (Components)	Species	Value
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7	Human and Animal	Not a sensitizer
Nonylphenol polyethylene glycol ether CAS No:127087-87-0	Human	Not a sensitizer

Germ Cell Mutagenicity

Name (Components)	Route	Value
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7	In Vitro	Not mutagenic
“	In Vivo	Not mutagenic
Nonylphenol polyethylene glycol ether CAS No:127087-87-0	In Vitro	Not mutagenic

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Carcinogenicity

Name (Components)	Route	Species	Value
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7	Dermal	Not Specified	Repeated exposure may cause skin tumor promotion in experimental animals.
Nonylphenol polyethylene glycol ether CAS No:127087-87-0			Did not cause cancer in lab animals.

Reproductive toxicity

Name (Components)	Route	Species	Value	Test Result	Exposure Duration
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7			Not Classified		
Nonylphenol polyethylene glycol ether CAS No:127087-87-0			No relevant data found.		

Specific Target Organ Toxicity - single exposure

Name (components)	Route	Species	Target Organ	Value	Test Result	Exposure Duration
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7	Inhalation		Central Nervous System	May cause drowsiness or dizziness	NOAEL Not available	
Nonylphenol polyethylene glycol ether CAS No:127087-87-0				No relevant data found.		

Specific Target Organ Toxicity - repeated exposure

Name (components)	Route	Species	Target Organ	Value	Test Result	Exposure Duration
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7		Rat	Kidney	Not considered relevant to humans. Not Classified.		
Nonylphenol polyethylene glycol ether CAS No:127087-87-0		Animals	Kidney Liver		Positive	

Aspiration Hazard

Name (Components)	Value
Naphtha (Petroleum), Heavy Aliphatic CAS No: 64742-96-7	Aspiration Hazard Toxicity Category 1
Nonylphenol polyethylene glycol ether CAS No:127087-87-0	Not likely to be as aspiration hazard.

SAFETY DATA SHEET Heavy Duty Compound

SDS No: 1036-1

Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013)

Date of last Revision: 08/19/2014

The method of exposure to crystalline silica that can lead to the adverse health effects described below is inhalation.

A. SILICOSIS

The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica dust. Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute. Chronic or Ordinary Silicosis (often referred to as Simple Silicosis) is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis. Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Although there may be no symptoms associated with complicated silicosis or PMF, the symptoms, if present, are shortness of breath, wheezing, cough and sputum production. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pulmonale). Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier and progression is more rapid.

Acute Silicosis can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis is fatal.

B. CANCER

IARC - The International Agency for Research on Cancer ("IARC") concluded that there was *"sufficient evidence"* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is *"sufficient evidence"* in experimental animals for the carcinogenicity of quartz and cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans (Group 1)*." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997).

The EU Scientific Committee for Occupational Exposure Limits (SCOEL) concluded in June 2002 (SCOEL Sum Doc. 94-final): "The main effect in humans of inhalation of respirable silica dust is silicosis. There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk."

C. AUTOIMMUNE DISEASES

Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers. For a review of the subject, the following may be consulted: "Occupational Exposure to Crystalline Silica and Autoimmune Disease", Environmental Health Perspectives, Volume 107, Supplement 5, pp. 793-802 (1999); "Occupational Scleroderma", Current Opinion in Rheumatology, Volume 11, pp. 490-494 (1999).

D. TUBERCULOSIS

J.B.CHEMICAL CO., INC.

SAFETY DATA SHEET Heavy Duty Compound

SDS No: 1036-1

Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013)

Date of last Revision: 08/19/2014

Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis. The following may be consulted for further information: Occupational lung Disorders, Third Edition, Chapter 12, entitled "Silicosis and Related Diseases", Parkes, W. Raymond (1994); "Risk of pulmonary tuberculosis relative to silicosis and exposure to silica dust in South African gold miners," Occup Environ Med., Volume 55, pp.496-502 (1998).

E. KIDNEY DISEASE

Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers. For additional information on the subject, the following may be consulted: "Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000).

F. NON-MALIGNANT RESPIRATORY DISEASES

The reader is referred to Section 3.5 of the NIOSH Special Hazard Review cited below, for information concerning the association between exposure to crystalline silica and chronic bronchitis, emphysema and small airways disease. There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers. It is unclear whether the observed associations exist only with underlying silicosis, only among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in the dust).

Sources of information:

The *NIOSH Hazard Review - Occupational Effects of Occupational Exposure to Respirable Crystalline Silica* published in April 2002 summarizes and discusses the medical and epidemiological literature on the health risks and diseases associated with occupational exposures to respirable crystalline silica. The *NIOSH Hazard Review* should be consulted for additional information, and citations to published studies on health risks and diseases associated with occupational exposure to respirable crystalline silica. The *NIOSH Hazard Review* is available from NIOSH - Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226, or through the NIOSH web site, www.cdc.gov/niosh/topics/silica, then click on the link "NIOSH Hazard Review: Health Effects of Occupational Exposure to Respirable Crystalline Silica".

12. Ecological information

- 12.1 **Ecotoxicity (aquatic and terrestrial, where available):** Not determined
- 12.2 **Persistence and degradability:** Not determined
- 12.3 **Bioaccumulative potential:** Not determined
- 12.4 **Mobility in soil:** Not determined
- 12.5 **Other adverse effects (such as hazardous to the ozone layer):** Not determined

13. Disposal considerations

- 13.1 **Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:** Dispose of contents/ container in accordance with the local/regional/national/international regulations. Do not contaminate any lakes, streams, ponds, or underground water supplies.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in

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SAFETY DATA SHEET Heavy Duty Compound

SDS No: 1036-1

Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013)

Date of last Revision: 08/19/2014

accordance with governmental regulations. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death.

14. Transport information

Because this product is produced and shipped in several different container sizes, domestically and internationally, please consult your transportation specialist for the proper shipping name and class.

- 14.1 **UN number:** Not regulated
- 14.2 **UN proper shipping name:** Not regulated
- 14.3 **Transport hazard class(es):** Not regulated
- 14.4 **Packing group, if applicable:** Not regulated
- 14.5 **Environmental hazards (e.g., Marine pollutant (Yes/No)):** Not determined
- 14.6 **Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not determined
- 14.7 **Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises:** Not determined

Additional Information:

15. Regulatory information

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

- **OSHA Hazard Communication Standard:** This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200 (see section 2).
- **TSCA:** Components of this product are listed on the TSCA Inventory.
- **SARA Title III, Section 302 (Extremely Hazardous Substances):** None.
- **SARA Title III, Section 313:** None.
- **SARA Title III, Section 311/312 Classifications:**

Fire Hazard: Yes	Pressure Hazard: No	Reactivity Hazard: No
Immediate Hazard: Yes	Delayed Hazard: Yes	
- **CERCLA Hazardous Substances:** This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Contact local authorities to determine if other reporting requirements apply.
- **Clean Air Act Section 112(r):** None.
- **Clean Water Act/Oil Pollution Act:** This product is classified as an oil under Section 311 of the Clean Water Act (40CFR110) and the Oil Pollution Act of 1990. Discharge or spills which produce a visible sheen on either surface water or in waterways/sewers which lead to surface water must be reported to the National Response Center at (800) 424-8802.
- **CA PROP 65:**

WARNING! This product contains a chemical known to the State of California to cause cancer: Crystalline silica.

WARNING! This product contains a chemical known to the State of California to cause birth defects or

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SAFETY DATA SHEET Heavy Duty Compound

SDS No: 1036-1

Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013)

Date of last Revision: 08/19/2014

other reproductive harm: None.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. Other information including date of preparation or last revision

Full text of H-Statements referred to under sections 2 and 3:

H227: Combustible liquid.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H311: Toxic in contact with skin.
H315: Causes skin irritation.
H316: Causes mild skin irritation.
H319: Causes severe eye irritation.
H320: Causes eye irritation.
H336: May cause drowsiness or dizziness.
H350: May cause cancer.
H372: Causes damage to lungs through prolonged or repeated exposure (Inhalation).
H411: Toxic to aquatic life with long lasting effects.
Asp Tox.1: Aspiration Toxicity Category 1
Acute Tox.3: Acute Toxicity Category 3
Acute Tox.4: Acute Toxicity Category 4
Carc 1A: Carcinogen Category 1A
Eye Irrit.2: Eye Irritant Category 2
Skin Irrit.3: Skin Irritant Category 3
STOT SE3: Specific Target Organ Toxicity Single Exposure Category 3
STOT RE1: Specific Target Organ Toxicity Repeated Exposure Category 1

Sources of key data used to compile the Safety Data Sheet:

International Agency for Research on Cancer
International Air Transport Association: Dangerous Goods Regulations.
International Maritime Organization: International Maritime Dangerous Goods Code
Components supplier data
Globally harmonized system of classification and labeling of chemicals (GHS Rev.5th e.2013)
European Chemicals Agency website
EU Registration, Evaluation and Restriction of Chemicals regulation (REACH): Classification and Labeling Inventory
US California Proposition 65
US Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
US Department of Health & Human Services. National Toxicology Program
US Department of Transport DOT 49 CFR
US National Fire Protection Association (NFPA) 704
US National Institute for Occupational Safety & Health (NIOSH) (exposure limits)

J.B.CHEMICAL CO., INC.

SAFETY DATA SHEET Heavy Duty Compound

SDS No: 1036-1

Version: 1.1 (REG_29 CFR 1910.1200/REG_GHS Rev.5th e.2013)

Date of last Revision: 08/19/2014

US Occupational Safety & Health Administration (OSHA) 29 CFR 1910.1200 (Hazard Communication Standard)
US OSHA 29 CFR 1910.1000 - Table Z1 (exposure limits)
US Superfund Amendments and Reauthorization Act (SARA) Title III Sections 302; 311/312 ; 313
US Toxic Substances Control Act (TSCA)

Key or legend to abbreviations and acronyms used in the safety data sheet:

ACGIH - American Conference of Governmental Industrial Hygienists
CAS No - Chemical Abstract System No.
CERCLA- US Comprehensive Environmental Response, Compensation, and Liability Act
COC - Cleveland Open Cup (flash and fire point)
DOT -Department Of Transportation
EPA - Environmental Protection Agency
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IMDG - International Maritime Dangerous Goods code
mg/m³ - milligrams per cubic meter
mg/l - milligrams per liter
NIOSH - National Institute for Occupational Safety and Health
NFPA- US National Fire Protection Association
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
OEL-Occupational Exposure Limits
PEL - Permissible Exposure Limits
ppb - Parts Per Billion
ppm - Parts Per Million
PMCC - Pensky-Martin Closed Cup (flash point)
RCRA - EPA Resource Conservation and Recovery Act
SARA - Superfund Amendments and Reauthorization Act Title I, II, III
SDS - Safety Data Sheet
STEL- Short Term Exposure Limit
TCC - Tag Closed Cup (flash point)
TLV - Threshold Limit Value
TWA - Time Weighted Average Exposure
< - Less than
> - More than

Procedure used to derive the classification for mixtures according to Regulations 29 CFR 1900.1200 and GHS Rev.5th e.2013:

Calculation method: Classification of mixtures based on ingredients of the mixture.

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