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SAFETY DATA SHEET

Issue Date 18 September 2015 Revision Date 18 September 2015 Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name: BIG SAM

Product Description: OPEN GEAR LUBRICANT

Other means of identification

Product # 023, 023-1 Synonyms None

Details of the supplier of the safety data sheet

Company Name CHEMCO INDUSTRIES, INC.

5731 Manchester Avenue St. Louis, MO 63110 www.chemcoindustries.com

314-647-1888

1-800-854-4236 (to Reorder)

Emergency telephone number

Emergency Telephone INFOTRAC 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

Specific Target Organ Toxicity - Repeated Exposure - Category 2 Aspiration Hazard - Category 1

Skin Irritation - Category 3 Eye Irritation - Category 2A Aerosol - Category 1

Reproductive Toxicity - Category 2 Flammable Liquids Category 2 Chronic aquatic toxicity - Category 3

Pictograms







Signal Word

Danger

Hazardous Statements - Physical

H225 - Highly flammable liquid and vapor

H222, H229 - Extremely flammable aerosol, Pressurized container may burst if heated

Hazardous Statements - Health

- H373 May cause damage to organs through prolonged or repeated exposure. H304 May be fatal if swallowed and enters airways
- H316 Causes mild skin irritation H319 Causes serious eye irritation
- H361 Suspected of damaging fertility or the unborn child.

Hazardous Statements - Environmental

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - General

- P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children.
- P103 Read label before use.

Precautionary Statements - Prevention

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection. P211 Do not spray on an open flame or other ignition source.
- P251 Do not pierce or burn, even after use.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray. P264 Wash thoroughly after handling.
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.

Precautionary Statements - Response

- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P370 + P378 In case of fire: Use water fog, dry chemical or carbon dioxide to extinguish. P314 Get Medical advice/attention if you feel unwell.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 Do NOT induce vomiting.
- P332 + P313 If skin irritation occurs: Get medical advice/attention.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 If eye irritation persists: Get medical advice/attention.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage

- P235 Keep cool.
- P403 Store in a well-ventilated place.
- P405 Store locked up.
- P410 Protect from sunlight.
 - P412 Do not expose to temperatures exceeding 50°C/122°F.

Precautionary Statements - Disposal

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% by Weight
0008052-41-3	STODDARD SOLVENT	15% - 26%
0064742-93-4	Asphalt, oxidized	10% - 22%
0064742-54-7	MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY PARAFFINIC	9% - 21%
0000074-98-6	PROPANE	7% - 15%
0000106-97-8	BUTANE	4% - 8%
0000110-54-3	HEXANE	2% - 5%
0000075-28-5	ISOBUTANE	2% - 4%

4. FIRST AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

Eve Contact

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Gently blot or brush away excess product. Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. Call a POISON CENTER/doctor if you feel unwell. Store contaminated clothing under water and wash before reuse or discard.

Ingestion

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Never give anything by mouth to an unconscious or convulsing victim. Keep person warm and quiet.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use water, fog, dry chemical, or carbon dioxide.

Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Unsuitable Extinguishing Media

Water may be ineffective but can be used to cool containers exposed to heat or flame.

Specific Hazards in Case of Fire

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force.

Aerosol cans may rupture when heated.

Heated cans may burst.

In fire, will decompose to carbon dioxide, carbon monoxide

Fire-Fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to

protect personnel.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA)and full turnout gear.

Care should always be exercised in dust/mist areas.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Flammable/combustible material.

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stay upwind; keep out of low areas. Immediately turn off or isolate any source of ignition. Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Clean up immediately. Use absorbent sweeping compound to soak up material and put into suitable container for proper disposal.

Recommended Equipment

Positive pressure, full-face piece self-contained breathing apparatus(SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Use explosion proof equipment. Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

7. HANDLING AND STORAGE

General

For industrial and institutional use only. For use by trained personnel only.
Keep away from children. Wash hands after use.
Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists.
Use good personal hygiene practices.
Eating, drinking and smoking in work areas is prohibited.
Remove contaminated clothing and protective equipment before entering eating areas.
Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld, or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

Store at temperatures below 120°F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical goggles, safety glasses with side shields or vented/splash proof goggles. Contact lenses may absorb irritants. Particles

may adhere to lenses and cause corneal damage.

Skin Protection

Wear gloves, long sleeved shirt, long pants and other protective clothing as required to minimize skin contact.

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Chemical-resistant clothing is recommended to avoid prolonged contact. Avoid unnecessary skin contact.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapors.

When spraying more than one half can continuously or more than one can consecutively, use NIOSH approved respirator.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA- Tables- Z1,2,3	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOS H TWA	NIOSH STEL (ppm)	NIOS H STEL	NIOSH Carcinogen
BUTANE								800	1900			
HEXANE	500	1800			1			50	180			
ISOBUTANE								800	1900			
MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY PARAFFINIC	500	2000			1							
PROPANE	1000	1800			1			1000	1800			
STODDARD SOLVENT	500	2900			1				350			

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
BUTANE	1000			
HEXANE	50	176		
ISOBUTANE	1000			
MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY PARAFFINIC				
PROPANE	See Appendix F: Minimal Oxygen Content			
STODDARD SOLVENT	100	572		

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

 Density
 7.26056 lb/gal

 Density VOC
 3.59384 lb/gal

 % VOC
 49.49813%

 VOC Actual
 3.59384 lb/gal

 VOC Actual
 430.65000 g/l

 VOC Regulatory
 3.59384 lb/gal

 VOC Regulatory
 430.65000 g/l

Appearance N.A.
Odor Threshold N.A.
Odor Description N.A.
pH N.A.
Water Solubility Nil

Flammability Flashpoint below 73 °F

Flash Point Symbol N.A.
Flash Point N.A.
Viscosity N.A.
Lower Explosion Level N.A.
Upper Explosion Level N.A.
Melting Point N.A.

Vapor Density Slower than ether

Freezing Point N.A.

Low Boiling Point 0 °F

High Boiling Point 156 °F

Decomposition Pt 0

Auto Ignition Temp N.A.

Evaporation Rate Slower than ether

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to Avoid

High temperatures.

Incompatible Materials

None known.

Hazardous Reactions/Polymerization

Will not occur.

Hazardous Decomposition Products

In fire, will decompose to carbon dioxide, carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

Overexposure will cause defatting of skin.

Causes mild skin irritation

Serious Eye Damage/Irritation

Overexposure will cause redness and burning sensation.

Causes serious eye irritation

Carcinogenicity

No data available

Germ Cell Mutagenicity

No data available

Reproductive Toxicity

Suspected of damaging fertility or the unborn child.

Respiratory/Skin Sensitization

No data available

Specific Target Organ Toxicity - Single Exposure

No data available

Specific Target Organ Toxicity - Repeated Exposure

May cause damage to organs through prolonged or repeated exposure.

LC50 (mouse, inhalation): 520,000 ppm (52%); 2-hour exposure.(4)

Aspiration Hazard

May be fatal if swallowed and enters airways

Acute Toxicity

Inhalation: effect of overexposure include irritation of respiratory tract, headache, dizziness, nausea, and loss of coordination. Extreme overexposure may result in unconsciousness and possibly death.

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0008052-41-3
                          STODDARD SOLVENT
   LC50 (rat): greater than 5500 mg/m3 (880 ppm) (whole body exposure
   for 4 hours) (1) LC50 (rat): greater than 8200 mg/m3 (1300 ppm) (2)
   LD50 (oral, rat): greater than 5 g/kg (1)
   LD50 (dermal, rabbit): greater than 3 g/kg (1)
                          MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY PARAFFINIC
0064742-54-7
   LD50 (Rodent - rat, Oral): >15 gm/kg ,Toxic effects: Details of toxic effects not reported other than lethal dose value.
   LD50(Rodent- rabbit, Administration onto the skin): >5 gm/kg, Toxic effects: Details of toxic effects not reported other than lethal
   dose value.
0000110-54-3
                          HEXANE
   LC50 (male rat): 38500 ppm (4-hour exposure); cited as 77000 ppm (271040 mg/m3) (1-
   hour exposure) (15) LC50 (rat): 48000 ppm (4-hour exposure) (16)
   LC50 (rat): 73680 ppm (260480 mg/m3) (4-hour exposure) (n-hexane and isomers) (1,3)
   LD50 (oral, 14-day old
   rat): 15840 mg/kg (3)
   LD50 (oral, young rat):
   32340 mg/kg (3) LD50
   (oral, adult rat): 28700
   mg/kg (3,16)
0000075-28-5
                          ISOBUTANE
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0000106-97-8 BUTANE

LC50 (mouse): 202000 ppm (481000 mg/m3) (4-hour exposure); cited as 680 mg/L (2-hour exposure) (9) LC50 (rat): 276000 ppm (658000 mg/m3) (4-hour exposure); cited as 658 mg/L (4- hour exposure) (9)

12. ECOLOGICAL INFORMATION

Toxicity

No data available.

Harmful to aquatic life with long lasting effects

Persistence and Degradability

No data available.

Bio-Accumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

Bio-accumulative Potential

0064742-54-7

MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY PARAFFINIC

Contains constituents with the potential to bioaccumulate.

Mobility in Soil

0064742-54-7

MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED (MILD) HEAVY PARAFFINIC

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

13. DISPOSAL CONSIDERATIONS

Water Disposal

Under RCRA, it is the responsibility of the user of the product, to determine a the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws

Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

14. TRANSPORT INFORMATION

U.S. DOT Information

Consumer Commodity, ORM-D

IMDG Information

Consumer Commodity, ORM-D

IATA Information

Consumer Commodity, ORM-D

15. REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000074-98-6	PROPANE	7% - 15%	SARA312,VOC,TSCA,ACGIH,OSHA
0000075-28-5	ISOBUTANE	2% - 4%	SARA312,VOC,TSCA,ACGIH

0000106-97-8	BUTANE	4% - 8%	SARA312,VOC,TSCA,ACGIH
0000110-54-3	HEXANE	2% - 5%	CERCLA,HAPS,SARA312,SARA313,VOC,TSCA,ACGIH,OSHA
0008052-41-3	STODDARD SOLVENT	15% - 26%	SARA312,VOC,TSCA,ACGIH,OSHA
0064742-54-7	MINERAL OIL,	9% - 21%	SARA312,VOC,TSCA,OSHA
0064742-93-4	Asphalt, oxidized	10% - 22%	SARA312,TSCA

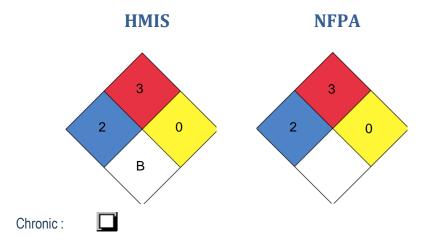
16. OTHER INFORMATION

Glossary

* There are points of differences between OSHA GHS and UN GHS. In 90% of the categories, they can be used interchangeably, but for the Skin Corrosion/Irritant Category and the Specific Target Organ Toxicity (Single and Repeated Exposure) Categories. In these cases, our system will say UN GHS.

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA-Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL-Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL-Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ

- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA
- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.



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