

Consolidated Oil Well Services, Inc.
P.O. Box 884
Chanute, KS 66720

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier : CAF-34
Chemical Name : Not Applicable, A Blend
Chemical Family : Not Applicable, A Blend
Manufacturer : CESI Chemical (a Flotek Industries, Inc. company)
 : 1004 S. Plainsman Road, Marlow, OK 73055
Emergency Phone : (405) 282-8510
Prepared by : Denise Patterson
Phone : (580) 658-6608
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient : Tributyl phosphate
CAS No. : 126-73-8
Wt. Percent Range : 15-35
OSHA PEL : 0.2 ppm
ACGIH TLV : 0.2 ppm
LD50 : Dermal 10,000 mg/kg (rabbit) Oral 1200 mg/kg (rat)
LC50 : No data available

Ingredient : Isooctyl Alcohol
CAS No. : 26952-21-6
Wt. Percent Range : Proprietary
OSHA PEL : 50 ppm (270 mg/m³) skin
ACGIH TLV : 50 ppm (266 mg/m³) skin
LD50 : No data available
LC50 : No data available

3. HAZARDS IDENTIFICATION

Human health hazards
Acute health hazards : Irritant
Chronic health hazards : Defatting and dermatitis of the skin
Route(s) of entry : Eyes, skin and inhalation
Safety hazards : None known
Environmental hazards : No information is available on the product.

4. FIRST AID MEASURES

Eye : Remove contact lenses at once. Immediately flush with copious amounts of water for at least 15 minutes while holding eyelids open. If irritation persists, seek medical attention.
Skin : Wash affected area thoroughly with soap and water for at least 15 minutes or until product is removed. Remove contaminated clothing and launder before reuse. If irritation develops, seek medical attention.
Inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek prompt medical attention.
Ingestion : Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point : >200 °F (>93.3 °C)
Lower Explosion Limit : Not applicable
Upper Explosion limit : Not applicable
Extinguishing Media : Water spray or fog, dry chemical, carbon dioxide or foam
Protective equipment : NIOSH/MSHA approved self-contained breathing apparatus (SCBA) and turnout gear.
Hazardous combustion : Under fire conditions, toxic acid vapors may be formed from phosphorus

products : oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear hand, eye, protective clothing and respiratory protective equipment to eliminate contact.

General precautions : Eliminate ignition sources. Evacuate all non-essential personnel.

Small spills : Soak up residue with an inert absorbent and place into appropriate containers for disposal or reclamation. Flush contaminated area thoroughly with water. Retain washings as contaminated waste.

Large spills : If possible stop the flow of chemical. Dike to contain and prevent spreading. Remove with vacuum truck or pump to salvage vessels. Treat residue as for small spills.

7. HANDLING AND STORAGE

Handling : Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Use with adequate ventilation. Do not take internally. Wear appropriate protective clothing and equipment during handling. Wash thoroughly after handling. Remove contaminated clothing and laundry before reuse.

Storage : Keep container closed when not in use. Store drums with the bung up. Carefully vent container before removing bung.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure standards : Not established for the product.

Hand protection : Nitrile rubber gloves.

Eye protection : Chemical splash goggles and face shield if conditions warrant.

Respiratory protection : Not normally required.

Engineering control measures : General (mechanical) room ventilation is expected to be satisfactory.

Other : Emergency eye wash fountains and safety showers should be in the immediate vicinity of any potential exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid

Appearance : Clear

Color : Colorless

Odor : Mild

Specific Gravity : 0.8520

Bulk Density : 7.11

Boiling Point : No data available

Freezing Point : <-20^o F (<-28.9^oC)

Solubility in water : Insoluble

pH : 7

Percent Volatiles : No data available

Vapor Pressure : No data available

10. STABILITY AND REACTIVITY

Stability : Stable

Conditions to avoid : Heat, sparks and open flames

Hazardous polymerization : Will not occur

Hazardous decomposition products : Under fire conditions, toxic acid vapors may be formed from phosphorus oxides.

Incompatibility : Strong oxidizing agents, inorganic acids, aldehydes, monomers and polymerizable esters, alkylene oxides, halogens and acid anhydrides.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Eye : Causes moderate to severe irritation. If not removed promptly, permanent injury may result.

Skin : May cause mild to moderate irritation with brief contact. Prolonged contact may cause severe irritation, drying, defatting and dermatitis.

Inhalation : May cause nose, throat and general upper respiratory tract irritation. Prolonged breathing of vapors may result in headache, nausea, weakness, dizziness and central nervous system (CNS) depression.

Ingestion : Low order of toxicity. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

Chronic Effects : No other known chronic effects.

Carcinogenicity : None of the ingredients are listed in NTP, IARC monographs or OSHA regulated.

12. ECOLOGICAL INFORMATION

Environmental Fate : Product is expected to be readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Waste disposal : Recycle if possible. Otherwise dispose to licensed disposal contractor.
Product disposal : Recycle if possible. Otherwise comply with all local, state and federal regulations.

Container disposal : Drain container thoroughly. Triple rinse with water. Send to reclaimer or dispose of properly. Comply with all local, state and federal regulations.

14. TRANSPORT INFORMATION

LAND (D.O.T.)

Shipping Name : Not Regulated
Label(s) required : None
Emergency Phone : (405) 282-8510

AIR (IATA)

Shipping Name : Not Regulated
Label(s) required : None

SEA (IMDG)

Shipping Name : Not Regulated
Label(s) required : None

15. REGULATORY INFORMATION

This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

OSHA Classification : Not Regulated

TSCA (USA) : All components listed.

DSL (Canada) : All components listed.

SARA Title III

Section 302 : Extremely Hazardous Substances (40CFR355): This product does not contain ingredients listed in Appendix A and B.

Sections 311/312

Immediate (acute) health hazard : YES

Delayed (chronic) health hazard : YES

Fire hazard : NO

Sudden Release of Pressure Hazard : NO

Reactive Hazard : NO

Section 313 Reportable Quantities : None

CERCLA

If the reportable quantity of this product is accidentally spilled, the incident is subject to the provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and must be reported to the National Response Center by calling (800) 424-8802.

Reportable Quantity : Not determined for the product.

16. OTHER INFORMATION

NFPA 704

Health : 2
Fire : 2
Reactivity : 0
Special : None

HMIS

Health : 2
Fire : 2
Reactivity : 0
Special : None

Disclaimer of Liability : The information contained in this MSDS was obtained from sources that we believe are reliable. However, the information is without any warranty, express or implied, regarding correctness. The methods of handling, storage, use and disposal of the product are beyond our control and may be outside the scope of our knowledge. For these reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.