



BROOKFIELD ENGINEERING LABORATORIES, INC.
11 COMMERCE BOULEVARD
MIDDLEBORO, MASSACHUSETTS 02346, USA

Material Safety Data Sheet

Fluid B4900, B10200, B21000, B41000,
B73000, B200000, B360000

Revision Date: *May 3, 2012*

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: General Purpose Viscosity Standards – Hydrocarbon Polymer

Product Description: Hydrocarbon Polymer

Product Code: B4900, B10200, B21000, B41000, B73000, B200000, B360000

Intended Use: Viscometer calibration standards

COMPANY IDENTIFICATION

Supplier: Brookfield Engineering Laboratories, Inc.
11 Commerce Boulevard
Middleboro, MA 02346
Phone: (508) 946-6200

EMERGENCY TELEPHONE (CHEM-TEL INC.):

Domestic (US/PR/Canada/US Virgin Islands): (800) 255-3924

International (Outside North America): +1 (813) 248-0585

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

- **OSHA Hazardous Substance(s) or Complex Substance(s)**

None present. This is not a hazardous substance as defined in the OSHA Hazard Communication Standard

SECTION 3 HAZARD IDENTIFICATION

These products are mixtures and/or supplied products. The following is based on characterizations of components as provided by suppliers

EFFECTS OF OVEREXPOSURE:

Acute effects

Eye: Will cause slight eye discomfort, but will not injure eye tissue. Direct contact may cause temporary redness and discomfort.

Skin: No significant irritation expected from a single short-term exposure. No hazard in normal industrial use.



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Inhalation: No significant effects expected from a single short-term exposure. Inhalation exposures are not expected under recommended uses/ conditions.

Oral: Minimal toxicity, low ingestion hazard in normal use.

Prolonged/ repeated exposure effects

Skin: Not classified as hazardous

Inhalation: Not classified as hazardous

Oral: Not classified as hazardous

Signs and symptoms of overexposure:

None identified

Medical conditions aggravated by exposure

None identified

Note

Because this is a high viscosity material, it is often handled at elevated temperatures. Splashes to the skin and/ or eyes can present a thermal hazard resulting in burns to the exposed areas.

NFPA HAZARD ID: Health: 0 Flammability: 1 Reactivity: 0
(National Fire Protection Association)

NOTE: This material should not be used for any other purpose than the intended use in Section 1

SECTION 4 FIRST AID MEASURES

INHALATION First aid is normally not required. However, if respiratory irritation, dizziness, nausea, or unconsciousness occurs due to excessive exposure, use proper respiratory protection and immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek medical attention.

SKIN CONTACT First aid is normally not required. Remove grossly contaminated clothing, including shoes, and launder before reuse.

EYE CONTACT Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention

INGESTION First aid is normally not required.



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Note If contacted by hot material, flush the affected area with cool water for at least fifteen minutes. Seek medical assistance for any mechanical removal of the material from the eye. Do not flush eyes with anything other than water.

Note to physician Medical personnel may leave the material in place to minimize physical damage to the skin... Medical personnel may cover the material with a burn gel to prevent the adhesion of any dressing to the injury or adhered material.

SECTION 5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate extinguishing media: Carbon dioxide, foam, dry chemical and water fog. Water can be used to cool fire exposed containers

FIRE FIGHTING

Fire fighting instructions: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to local emergency plan. Use water spray to keep the exposed containers cool. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

Unusual fire hazards: None identified

Hazardous combustion products: Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Fumes, smoke, carbon monoxide, aldehydes and other decomposition products

FLAMMABILITY PROPERTIES

Flash point °C (°F) [method]: >257 °F/ 125°C (Pensky-Martens)

Flammable limits (approx. Volume % in air): not determined

Autoignition temperature °C (°F): not determined

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills/releases to appropriate authorities as required.

CONTAINMENT/ CLEANUP

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

LAND SPILL: Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills in a public area, keep public away and advise authorities. Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Recover by pumping or with a suitable absorbent. If liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

WATER SPILL: Confine the spill immediately with booms. Notify relevant authorities. Remove from the surface by skimming or with suitable absorbents

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

PERSONAL PROTECTIVE EQUIPMENT FOR SPILLS



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Eyes: Use proper protection – safety glasses as a minimum

Skin: Washing at mealtime and end-of-shift is adequate

Inhalation: No respiratory protection should be needed

Precautionary measures: Avoid eye contact. Use reasonable care

SECTION 7 HANDLING AND STORAGE

HANDLING

Avoid prolonged/ repeated skin contact. Use with adequate ventilation.

STORAGE:

Keep containers closed when not in use. Do not store in open or unlabelled containers. Store away from strong oxidizing agents and combustible materials. Do not store near heat, sparks, flame or strong oxidants.

SPECIAL PRECAUTIONS

Prevent small spills and leakages to optimize housekeeping and to avoid slip hazard.

EMPTY CONTAINER WARNING

Empty containers retain residue (liquid and/or vapor) and can be dangerous. 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. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

No workplace exposure limits have been established for this product

ENGINEERING CONTROLS

General ventilation is recommended. No local exhaust ventilation should be needed

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as conditions of use, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection:

No respiratory protection should be needed

Hand Protection:

No special protection needed

Eye Protection:

Use proper protection – safety glasses as a minimum



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Specific Hygiene Measures:

Washing at mealtime and end-of-shift is adequate

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Cannon Instrument Company as indicated in Section 1 for additional data.

GENERAL INFORMATION

Physical state: Viscous liquid
Form: Liquid
Color: Clear, colorless
Odor: Characteristic odor
Odor threshold: not available

IMPORTANT HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION

Specific Gravity @ 25°C: <~0.9
Bulk density g/cc: not determined
Density, kg/m³ (lbs./gal.): not determined
Flash point °C (°F) [method]: 257 °F/ 125 °C (Pensky-Martens)
Flammable limits (approx. Volume % in air): not determined
Ignition temperature (polymers) °C (°F): not determined
Autoignition temperature °C (°F): not determined
Boiling point/range °C (°F): not determined
Vapor density @ 101 kPa (air =1): not determined
Vapor pressure @ 20°C, kPa (mm Hg): not determined. negligible
Evaporation rate (n-butyl acetate =1): not determined
pH: not applicable
Log Pow (n-Octanol/water partition coefficient): not determined
Solubility in water (20 °C): negligible
Viscosity: see product specification

OTHER INFORMATION

Freezing point °C (°F): not determined
Melting Point °C (°F): not determined
Pour point °C (°F): not determined
Molecular weight: not available
Hygroscopic: no
Coefficient of thermal expansion: not determined

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Extreme heat and high energy sources of ignition.

MATERIALS TO AVOID: Strong oxidizing agents/ materials can cause a reaction



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HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur

SECTION 11 TOXICOLOGICAL INFORMATION

Test data are not available. Information from suppliers indicates that these products are not classifiable as hazardous. A range of similar materials have been tested for oral toxicity and eye/ skin irritation, and indicated that these products are practically non-toxic and not classifiable as a health hazard.

SECTION 12 ECOLOGICAL INFORMATION

Environmental fate and distribution

No specific environmental data are available for these products/ formulations; the following assessments are based on information for similar components/ products.

Air: This product has a low vapor pressure. As a result, it is unlikely to become an atmospheric contaminant under recommended conditions of use

Water: This product has low water solubility. Since it has a specific gravity of <1, if discharged to water, it will form a surface film. No specific data are available from the suppliers

Soil: No specific data are available from the suppliers

Degradation: No specific data are available from the supplier for this product. This product is unlikely to be significantly biodegradable

Environmental effects

Toxicity to water organisms: No specific ecological data are available from the suppliers

Toxicity to soil organisms: No specific ecological data are available from the suppliers. These products are not expected to adversely affect microbial activity

Bioaccumulation: No specific ecological data are available from the suppliers. These products are not expected to bioaccumulate

Fate and effects in water treatment plants

No specific data are available from the suppliers

SECTION 13 DISPOSAL CONSIDERATIONS

When a decision is made to discard this material, it is not considered a hazardous waste under Resource Conservation and Recovery Act (RCRA).

State or local laws may impose additional regulatory requirements regarding disposal



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WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

SECTION 14 TRANSPORT INFORMATION

Note: The information provided below may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations for additional requirements and mode-specific, material-specific, or quantity-specific shipping requirements.

United States Department of Transportation (US DOT):

UN/ID#	Proper Shipping Name	Class/Division	Hazard Label(s)	Packing Group
Not Regulated As A Hazardous Material Or Dangerous Good For This Mode of Transportation.				

International Air Transport Association (IATA):

UN/ID#	Proper Shipping Name	Class/Division	Hazard Label(s)	Packing Group
Not Regulated As A Hazardous Material Or Dangerous Good For This Mode of Transportation.				

SECTION 15 REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: This material is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

NATIONAL CHEMICAL INVENTORY LISTING: This product, and/ or its constituents, is listed on the US EPA/ TSCA (Toxic Substances Control Act) Inventory

COMMUNITY RTK:

Chemical Name	CAS Number	Typical Value	Component TPQ	Product TPQ
Polybutene (isobutylene/ butane copolymer	9003-29-6	100%	Not applicable	Not applicable

Section 304 CERCLA HAZARDOUS SUBSTANCES:

This product contains no chemicals that are classified as hazardous under CERCLA

SARA (311/312) REPORTABLE HAZARD CATEGORIES:

This product contains no chemicals that are classified as hazardous under SARA 312

SARA (313) TOXIC RELEASE INVENTORY:



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This product contains no chemicals that are regulated under SARA 313

International chemical inventories and hazard classifications

This product and/ or its components are on the Canadian Domestic Substance List/ NDSL, or are otherwise in compliance with related regulations.

WHMIS Classifications (Canada):

This product is not controlled under WHMIS

This product and/ or its components are on EINECS (European Inventory of Existing Chemical Substances) and/ or ELINCS (European Library of Notified Chemical Substances), or is otherwise in conformance with related EU directives/ regulations.

EU Hazard Classification, risk and safety phrases (Europe):

This material is not dangerous as defined by the EU Dangerous Substances/Preparations Directives.

SECTION 16

OTHER INFORMATION

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