



MATERIAL SAFETY DATA SHEET

www.krakenchem.com - info@krakenchem.com

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Kraken Bond Extreme Fire Foam B2 (Straw)

1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOTUS GLOBAL TRADE LLC
8684 VIRGINIA MEADOWS DR, MANASSAS, VA,
20109 UNITED STATES OF AMERICA
T + 1 571 445-5665

1.4. Emergency telephone number

For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable aerosol Category 1	H222
Acute toxicity (inhalation:gas) Category 4	H332
Skin corrosion/irritation Category 2	H315
Serious eye damage/eye irritation Category 2A	H319
Respiratory sensitisation Category 1	H334
Skin sensitization Category 1	H317
Carcinogenicity Category 2	H351
Specific target organ toxicity (single exposure) Category 3	H335
Specific target organ toxicity (repeated exposure) Category 2	H373

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS02

GHS07

GHS08

Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H222 - Extremely flammable aerosol
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use



MATERIAL SAFETY DATA SHEET

www.krakenchem.com - info@krakenchem.com

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat, hot surfaces, sparks, open flames. - No smoking
P211 - Do not spray on an open flame or other ignition source
P251 - Pressurized container: Do not pierce or burn, even after use
P261 - Avoid breathing gas, spray, vapors
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P284 - [In case of inadequate ventilation] wear respiratory protection
P302+P352 - If on skin: Wash with plenty of water
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned: Get medical advice/attention
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Isocyanic acid, polymethylenepolyphenylene ester	(CAS No) 9016-87-9	30 - 45	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
isobutane	(CAS No) 75-28-5	2.5 - 10	Flam. Gas 1, H220
propane	(CAS No) 74-98-6	2.5 - 10	Flam. Gas 1, H220
dimethyl ether	(CAS No) 115-10-6	2.5 - 10	Flam. Gas 1, H220
2-Propanol, 1-chloro-, phosphate (3:1)	(CAS No) 13674-84-5	2 - 10	Acute Tox. 4 (Oral), H302

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.



MATERIAL SAFETY DATA SHEET

www.krakenchem.com - info@krakenchem.com

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/injuries after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurized container: may burst if heated.
Reactivity	: Extremely flammable aerosol. Pressurized container: may burst if heated.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.



MATERIAL SAFETY DATA SHEET

www.krakenchem.com - info@krakenchem.com

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

USA - ACGIH - Occupational Exposure Limits	
Local name	Propane
ACGIH STEL (ppm)	1000 ppm (EX - Explosion hazard)
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Propane
OSHA PEL (TWA) (mg/m³)	1800 mg/m³
OSHA PEL (TWA) (ppm)	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)	
No additional information available	
isobutane (75-28-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Isobutane
ACGIH STEL (ppm)	1000 ppm (EX - Explosion hazard)
Remark (ACGIH)	TLV® Basis: CNS impair
Regulatory reference	ACGIH 2020
propane (74-98-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Propane
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Propane
OSHA PEL (TWA) (mg/m³)	1800 mg/m³
OSHA PEL (TWA) (ppm)	1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves. EN 374. Nitrile rubber gloves

Eye protection:

Chemical goggles or safety glasses. EN 166.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection. EN 14387



Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Gas
Appearance	: Liquid under pressure.
Color	: Light red
Odor	: Characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: Pressurized container: may burst if heated.
Oxidizing properties	: No data available
Vapor pressure	: 5 bar
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 19 - 25 kg/m ³
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

VOC content	: 2 g/l
-------------	---------

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurized container: may burst if heated.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.



Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

Acute toxicity : Inhalation:gas: Harmful if inhaled.

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
ATE US (oral)	500 mg/kg bodyweight

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)	
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing cancer.

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)	
IARC group	3 - Not classifiable

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)	
STOT-single exposure	May cause respiratory irritation.

Reproductive toxicity : Not classified

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)	
LOAEL (animal/female, F0/P)	99 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
NOAEL (animal/male, F0/P)	85 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified



MATERIAL SAFETY DATA SHEET

www.krakenchem.com - info@krakenchem.com

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

Symptoms/injuries after inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/injuries after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/injuries after eye contact : Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)	
LC50 fish 1	51 mg/l Test organisms (species): Pimephales promelas
EC50 Daphnia 1	131 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	5.2 mg/l Test organisms (species): other:Fish – chronic QSAR (Esters)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1950 Aerosols (flammable, (each not exceeding 1 L capacity)), 2.1

UN-No.(DOT) : UN1950

Proper Shipping Name (DOT) : Aerosols flammable, (each not exceeding 1 L capacity)

Class (DOT) : 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas



DOT Packaging Non Bulk (49 CFR 173.xxx) : None

DOT Packaging Bulk (49 CFR 173.xxx) : None

DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols

DOT Packaging Exceptions (49 CFR 173.xxx) : 306

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 75 kg



MATERIAL SAFETY DATA SHEET

www.krakenchem.com - info@krakenchem.com

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel

DOT Vessel Stowage Other : 25 - Shade from radiant heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

Emergency Response Guide (ERG) Number : 126

Other information : No supplementary information available.

TDG

No additional information available

Transport by sea

UN-No. (IMDG) : 1950

Proper Shipping Name (IMDG) : AEROSOLS

Class (IMDG) : 2 - Gases

MFAG-No : 126

Air transport

UN-No. (IATA) : 1950

Proper Shipping Name (IATA) : Aerosols, flammable

Class (IATA) : 2

SECTION 15: Regulatory information

15.1. US Federal regulations

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
--------------------------	---

isobutane (75-28-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Not subject to reporting requirements of the United States SARA Section 313

propane (74-98-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations

CANADA

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9)

Listed on the Canadian DSL (Domestic Substances List)

isobutane (75-28-5)

Listed on the Canadian DSL (Domestic Substances List)

propane (74-98-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available



MATERIAL SAFETY DATA SHEET

www.krakenchem.com - info@krakenchem.com

Safety Data Sheet

According to U.S.A. Federal Hazcom 2012

Issue date: 12.09.2023 Version: 0.0

15.3. US State regulations

Component	State or local regulations
Isocyanic acid, polymethylenepolyphenylene ester(9016-87-9)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - New Jersey - Right to Know Hazardous Substance List
isobutane(75-28-5)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
propane(74-98-6)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-statements:

H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

SDS US KRAKEN

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other 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. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable