

This brief provides a general overview of the **Safety Data Sheet** requirements in the Hazard Communication Standard OSHA's 29 CFR 1910.1200(g) and Appendix D of 29 CFR 1910.1200).

Section 1 ~ Identification

Identity (As Used On Label and List)

K238 (A1041) EX-PAND

Date Prepared:

12-01-2023

Company Information:

KAYLINE COMPANY, INC.

Emergency Telephone Number:

1-800-424-9300

Address (Number, Street, Suite/Apt#)

3303 LAKESIDE AVENUE

Telephone Number for Information:

1-800-426-5820

(City, State, and Zip Code)

CLEVELAND, OH 44114

Signature of Prepare (Optional)

REGULATORY DEPT.

Section 2 ~ Hazard(s) Identification

Physical Hazards

Flammable aerosols

Category 1

Health Hazards

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2A

Sensitization, respiratory

Category 1

Sensitization, skin

Category 1

Carcinogenicity

Category 2

Specific target organ toxicity, repeated exposure

Category 2

OSHA Defined Hazards

Not Classified

Label Elements



Signal Word: Danger

Hazard Statement

Extremely flammable aerosol. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe gas. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.

Response

If on skin: Wash with plenty of water. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **If exposed or concerned:** Get medical advice/attention. **If skin irritation or rash occurs:** Get medical advice/attention. **If eye irritation persists:** Get medical advice/attention. **If experiencing respiratory symptoms:** Call a poison center/doctor. Take off contaminated clothing and wash before reuse.

Storage

Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not Otherwise Classified (HNOC)

None known.

Supplemental Information

None

Section 3 ~ Composition/Information on Ingredients

Chemical Name	Common Name and Synonyms	CAS No.	%(Wt.)
Butane		106-97-8	10 – 20
Dimethyl Ether		115-10-6	10 – 20
Methylene Bisphenol Isocyanate (MDI)		101-68-8	10 – 20
Propane		74-98-6	2.5 – 10
Other components below reportable levels			60 – 80

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Section 4 ~ First Aid Measures

Inhalation: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Skin Contact: Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.

Most Important Symptoms/Effects, Acute and Delayed: Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Indication of Immediate Medical Attention and Special Treatment Needed: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General Information: IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

Section 5 ~ Fire Fighting Measures

Suitable Extinguishing Media: Dry powder. Carbon dioxide (CO2).

Unsuitable Extinguishing Media: Water.

Specific Hazards Arising from The Chemical: Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Special Protective Equipment and Precautions for Firefighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire-Fighting Equipment/Instructions: Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific Methods: Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

General Fire Hazards: Extremely flammable aerosol.

Section 6 ~ Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and Materials For Containment and Cleaning Up: Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep

combustibles (wood, paper, oil, etc.) away from spilled material. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. **Small Spills:** Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental Precautions: Avoid discharge into drains, water courses or onto the ground.

Section 7 ~ Handling and Storage

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for Safe Storage, Including Any Incompatibilities: Level 3 Aerosol. Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

Section 8 ~ Exposure Controls/Personal Protection

Occupational Exposure Limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Methylene Bisphenol Isocyanate (MDI) (101-68-8)	Ceiling	0.2 mg/m3 0.02 ppm
Propane (74-98-6)	PEL	1800 mg/m3 1000 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Butane (106-97-8)	STEL	1000 ppm
Methylene Bisphenol Isocyanate (MDI) (101-68-8)	TWA	0.005 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Butane (106-97-8)	TWA	1900 mg/m3 800 ppm
Methylene Bisphenol Isocyanate (MDI) (101-68-8)	Ceiling	0.2 mg/m3 0.02 ppm
	TWA	0.05 mg/m3 0.005 ppm
Propane (74-98-6)	TWA	1800 mg/m3 1000 ppm

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
Dimethyl Ether (115-10-6)	TWA	1880 mg/m3 1000 ppm

Biological Limit Values: No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate. Eye wash facilities and emergency shower must be available when handling this product.

Individual Protection Measures, Such as Personal Protective Equipment

Eye/Face Protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other: Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory Protection: If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Thermal Hazards: Wear appropriate thermal protective clothing, when necessary.

General Hygiene Considerations: Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

Section 9 ~ Physical Chemical Properties

Appearance	Evaporation Rate: Not available.	Solubility(ies)
Physical State: Gas.	Flammability (solid, gas): Not available.	Solubility (water): Not available.
Form: Aerosol.	Upper/Lower Flammability or Explosive Limits	Partition Coefficient (n-octanol/water): Not available.
Color: Not available.	Flammability Limit – Lower (%): Not available.	Auto-Ignition Temperature: Not available.
Odor: Not available.	Flammability Limit – Upper (%): Not available.	Decomposition Temperature: Not available.
Odor Threshold: Not available.	Explosive Limit - Lower (%): Not available.	Viscosity: Not available.
pH: Not available.	Explosive Limit - Upper (%): Not available.	Other Information
Melting Point/Freezing Point: Not available.	Vapor Pressure: Not available.	Explosive Properties: Not explosive.
Initial Boiling Point and Boiling Range: Not available.	Vapor Density: Not available.	Oxidizing Properties: Not oxidizing.
Flash Point: -156.0 °F (-104.4 °C) Propellant estimated	Relative Density: Not available.	

Section 10 ~ Stability and Reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability: Material is stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur.

Conditions to Avoid: Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible Materials: Strong oxidizing agents. Nitrates. Alkaline metals. Alcohols. Fluorine. Chlorine. Phenols.

Hazardous Decomposition or Byproducts: No hazardous decomposition products are known.

Section 11 ~ Toxicological Information

Information on Likely Routes of Exposure

Inhalation: May cause damage to organs through prolonged or repeated exposure by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Eye Contact: Causes serious eye irritation.

Ingestion: Expected to be a low ingestion hazard.

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Difficulty in breathing. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on Toxicological Effects

Acute Toxicity: May cause an allergic skin reaction.

Components

Species

Test Results

Butane (106-97-8)

Acute

Inhalation LC50

Mouse

1237 mg/l, 120 Minutes

52%, 120 Minutes

1355 mg/l

Rat

Dimethyl Ether (115-10-6)

Acute

Inhalation NOEL

Rat

2 ppm, 6 Hours

Oral LD50

Rat

460 mg/kg

Methylene Bisphenol Isocyanate (MDI) (101-68-8)

Acute

Dermal LD50

Rabbit

> 9400 mg/kg, 24 Hours

Inhalation LC50

Rat

>2.24 mg/l, If <1L: Consumer Commodity Hours

0.49 mg/l, 4 Hours

> 2000 mg/kg

Oral LD50

Rat

Propane (74-98-6)

Acute

Inhalation LC50

Mouse

1237 mg/l, 120 Minutes

52%, 120 Minutes

Rat

1355 mg/l

658 mg/l/4h

* Estimates for product may be based on additional component data not shown.

Skin Corrosion/Irritation: Causes skin irritation.**Serious Eye Damage/Eye Irritation:** Causes serious eye irritation.**Respiratory or Skin Sensitization****Respiratory Sensitization:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.**Skin Sensitization:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.**Carcinogenicity:** Suspected of causing cancer.**IARC Monographs. Overall Evaluation of Carcinogenicity:** Methylene bisphenol isocyanate (MDI) (101-68-8) 3 Not classifiable as to carcinogenicity to humans.**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):** Not listed.**US. National Toxicology Program (NTP) Report on Carcinogens:** Not available.**Reproductive Toxicity:** This product is not expected to cause reproductive or developmental effects.**Specific Target Organ Toxicity - Single Exposure:** Not classified.**Specific Target Organ Toxicity - Repeated Exposure:** Respiratory system. Eyes. May cause damage to organs through prolonged or repeated exposure.**Aspiration Hazard:** Not likely, due to the form of the product.**Chronic Effects:** May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.**Section 12 ~ Ecological Information****Ecotoxicity:** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.**Components**

Dimethyl Ether (115-10-6)

Species**Test Results****Aquatic**

Crustacea

EC50

Water Flea (*Daphnia pulex*)

4.3 - 7.8 mg/l, 48 hours

Fish

LC50

Striped Bass (*Morone saxatilis*)

10.302 - 16.743 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and Degradability: No data is available on the degradability of this product.**Bioaccumulative Potential****Partition coefficient n-octanol / water (log Kow)**

Butane

2.89

Dimethyl Ether

0.1

Propane

2.36

Mobility in Soil: No data available.**Other Adverse Effects:** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.**Section 13 ~ Disposal Considerations****Disposal Instructions:** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.**Local Disposal Regulations:** Dispose in accordance with all applicable regulations.**Hazardous Waste Code:** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.**Waste from Residues / Unused Products:** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).**Contaminated Packaging:** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.**Section 14 ~ Transport Information****DOT****UN Number:** UN1950**UN Proper Shipping Name:** Aerosols, flammable, (each not exceeding 1 L capacity)**Transport Hazard Class(es)****Class:** 2.1**Subsidiary Risk:** -**Label(s):** 2.1**Packing Group:** Not applicable.**Special Provisions:** N82**Packaging Exceptions:** 306**Packaging Non Bulk:** None**Packaging Bulk:** None**IATA****UN Number:** UN1950**UN Proper Shipping Name:** Aerosols, flammable**Transport Hazard Class(es)****Class:** 2.1**Subsidiary Risk:** -**Label(s):** 2.1**Packing Group:** Not applicable.**Environmental Hazards:** No.**ERG Code:** 10L**Passenger and Cargo Aircraft:** Allowed with restrictions.**Other Information****Cargo Aircraft Only:** Allowed with restrictions.**Packaging Exceptions:** LTD QTY**IMDG****UN Number:** UN1950**UN Proper Shipping Name:** AEROSOLS**Transport Hazard Class(es)****Class:** 2.1**Subsidiary Risk:** -**Label(s):** 2.1**Packing Group:** Not applicable.**Environmental Hazards****Marine Pollutant:** No.**EmS:** F-D, S-U**Packaging Exceptions:** LTD QTY**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable.

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

Special Precautions for User: Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

DOT

IATA;IMDG



Section 15 ~ Regulatory Information

US Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern: Methylene bisphenol isocyanate (MDI) (101-68-8) Methylene Diphenyl Diisocyanate (MDI) And Related Compounds Action Plan [RIN 2070-ZA15]

CERCLA Hazardous Substance List (40 CFR 302.4): Methylene Bisphenol Isocyanate (MDI) (101-68-8) Listed.

SARA 304 Emergency Release Notification: Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories:	Immediate Hazard – Yes	Delayed Hazard - Yes
	Fire Hazard – Yes	Pressure Hazard - No
	Reactivity Hazard - No	

SARA 302 Extremely Hazardous Substance: Not listed.

SARA 311/312 Hazardous: No chemical

Chemical Name	CAS Number	% By Wt.
Methylene Bisphenol Isocyanate (MDI)	101-68-8	10 – 20

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List: Methylene bisphenol isocyanate (MDI) 101-68-8)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Butane (106-97-8) Dimethyl Ether (115-10-6) Propane (74-98-6)

Safe Drinking Water Act (SDWA): Not regulated.

US State Regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100): Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Butane (106-97-8) Methylene bisphenol isocyanate (MDI) (101-68-8)

US. Massachusetts RTK - Substance List	US. New Jersey Worker and Community Right-to-Know Act	US. Pennsylvania Worker and Community Right-to-Know Law	US. Rhode Island RTK
Butane (106-97-8)	Butane (106-97-8)	Butane (106-97-8)	Butane (106-97-8)
Dimethyl Ether (115-10-6)	Dimethyl Ether (115-10-6)	Dimethyl Ether (115-10-6)	Dimethyl Ether (115-10-6)
Methylene bisphenol isocyanate (MDI) (101-68-8)	Methylene bisphenol isocyanate (MDI) (101-68-8)	Methylene bisphenol isocyanate (MDI) (101-68-8)	Methylene bisphenol isocyanate (MDI) (101-68-8)
Propane (74-98-6)	Propane (74-98-6)	Propane (74-98-6)	Propane (74-98-6)

US. California Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Section 16 ~ Other Information

	NFPA	HMIS	Key
HEALTH	3*	3*	4= Severe
FLAMMABILITY	4	4	3= Serious
REACTIVITY	2	2	2= Moderate
OTHER/PROTECTION	-	X	1= Slight
			0= Minimal

Disclaimer: Omega Industrial Supply, Inc. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.